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PSYCHOLOGICAL ABSTRACTS

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PSYCHOLOGICAL ABSTRACTS

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GENERAL

777. Bond, W. R. A motor-driven make-break stimulus selector. *Science*, 1932, 76, 146-147.—A device suitable for stimulating muscle and nerve preparations with induction shocks at given time intervals is described and diagrammatically represented.—*E. H. Kemp* (Clark).

778. Ferro, A. *Spirito e corpo. Ipotesi e discussioni.* (Spirit and body. Hypotheses and discussion.) Milan: Soc. Ed. Dante Alighieri, 1932. Pp. 160.—The origin of the antithesis between the internal and external worlds is first studied in the individual consciousness, then in the collective consciousness, and finally in the history of philosophical thought. The hypotheses about the connection between the mind and body are reduced essentially to the four following: (1) the soul is only a form of activity of the body (materialism); (2) the soul and the body are two simultaneous expressions of the same being (psychophysical parallelism); (3) the mind and the body are two different substances joined by reciprocity of action (physical influence); (4) the true reality is the mind. The book is devoted to a critical examination of these four hypotheses. The author considers materialism as a point of view no longer tenable by serious psychologists. The dignity of thought and the moral worth of man consists not in possession, but in the slow and painful discovery of truth. In the final chapter, on the psychic unknown, he declares that the psychic activity which produces the phenomenon of consciousness mediating creative synthesis is absolutely unknown.—*V. D'Agostino* (Turin).

779. Grasselli, G. *Storia di una mente. Testimonianze del nostro tempo.* (The story of a mind. Evidences of our times.) Bari: Laterza, 1932. Pp. 206.—The author's story of his own mind comprises ten chapters: the first years; the grandmother; the crisis of adolescence; the Bible, Hélène; the war; philosophy; friendship; the voluptuous city; the voyage in Germany. The author's interest in mental processes, his careful delineation of disturbances and contrasts of emotions during the formative period, his observations on various authors and upon the ancient and modern philosophers, and his descriptions of life in relation to external action which reveals inner tumult, renders the book useful to those who wish to sound the depths of human consciousness.—*V. D'Agostino* (Turin).

780. Guilford, J. P. *Instructors' guide to Experimental Studies in Psychology.* Lincoln, Neb.: Author, 1932. Pp. 25.—*E. H. Kemp* (Clark).

781. Hausmann, M. F. A new apparatus for measuring choice and decision. *J. Exper. Psychol.*, 1932, 15, 218-225.—*S. Renshaw* (Ohio State).

782. Henning, H., & Schwenker, H. Register zu den Bänden 101-125, *Zeitschrift für Psychologie.* (Index to volumes 101-125 of the *Zsch. f. Psychol.*) Leipzig: Barth, 1932. Pp. 156.—*R. B. MacLeod* (Cornell).

783. Heun, E. *Erkenntnislehre und Psychoanalyse. Grundlagen einer anthropologischen Erkenntnislehre.* (The theory of knowledge and psychoanalysis. Fundamentals of an anthropological theory of knowledge.) *Zentbl. f. Psychotherap.*, 1932, 5, 195-210.—This article consists of an introduction giving Heun's theory of knowledge, and a presentation of Jaensch's theory of categories on the basis of structure-typology, with reference to the relationship between this and psychoanalysis, showing that both interpret the same phenomena from different angles. An anthropological interpretation of perception is the common point around which all systems of psychology and philosophy revolve, and the common basis for a creative integration of the essentially anthropological trends of depth psychology. A philosophical anthropology is also the goal of an objective psychology such as that of Jaensch. Heun discusses especially the connection between Jaensch's theory of dishomogeneity of different psychophysical and psychic layers and the concepts of psychoanalysis. The complex and over-compensation are the equivalents of dishomogeneous structure. An integrated personality may show phenomena of disintegration in adapting to a disintegrated environment. Continuous disintegration is also necessary for development. Hence, disintegration is not necessarily connected with dishomogeneity of personality. The latter arises only when a stage of integration is abnormally persistent, as in the neuroses.—*M. E. Morse* (Hyattsville, Md.).

784. Howells, T. H. Apparatus for measuring activity. *J. Exper. Psychol.*, 1932, 15, 226-233.—Two types of activity cages for animals are described, one with electrical and one with hydraulic registration.—*S. Renshaw* (Ohio State).

785. Klein, D. B. Scientific understanding in psychology. *Psychol. Rev.*, 1932, 39, 552-569.—In its attempt to become a science and purge itself of animism, psychology has patterned itself too closely after the natural sciences and has thereby failed to interpret human nature adequately. Psychology has as much right to use anthropomorphic interpretations as chemistry has to use chemical ones. Four methods or categories of analysis are open to psychology. The first three, the structural continuity or machine-model type, the functional type, and the logical type, are shared with other natural sciences, but the "empathic" type is its unique method. This last has to do with the direct interpretation of human motives

on an experiential level, and supplements, without excluding, the other three.—*A. G. Bills* (Chicago).

786. Lindworsky, J. *Theoretische Psychologie*. (Theoretical psychology.) (4th ed.) Leipzig: Barth, 1932. Pp. viii + 110. RM. 5.00.—See VII: 18.—*R. R. Willoughby* (Clark).

787. McNeill, H. *Le Congrès de Psychologie de Copenhague*. (The Congress of Psychology at Copenhagen.) *Rev. néo-scolas.*, 1932, 36, 475-482.—The author gives the data available at present regarding the Tenth International Congress of Psychology: the number of members and countries represented, number of communications in each of the official languages, the various sections of the congress, etc. Brief résumés of selected communications follow. The general characteristics of the congress are noted, with comments. The resolutions of the symposium on terminology are also given.—*R. Nihard* (Liège).

788. P'an, S. [A study of "consciousness."] (*Chinese*) *Edu. Rev.*, 1931, 23, No. 3, 17-32; No. 4, 17-29.—A theoretical discussion of the nature and existence of "consciousness." Following Titchener's analysis of "consciousness" into three components, the author goes on to argue that (1) sensations are nothing but "objective reality or objective world which we are aware of"; (2) images are "substituted objects-of-sensation"; and (3) feelings are "some sort of our bodily states which we are aware of," and are similar to sensations. Hence, the "content of consciousness," which is composed of these three elements, must also be "an objective world which we are aware of." We only know that there are a complex organism, on the one hand, and a complex world, on the other, incessantly affecting each other, and there exists no such thing as "mind." The older psychologies, especially introspective structuralism, are really analyzing the phenomena of the objective world and not the "mind" at all. In the author's opinion, the behaviorists have neither clearly seen this fundamental error of the older psychologies, nor have they known what "consciousness" really is, and their attack on the existence of "consciousness" is therefore not relevant.—*C.-F. Wu* (Nat. Res. Inst. Psychol., China).

789. Budy, H. *Psychologien ohne Seele*. (Psychologies without souls.) *Scientia*, 1932, 52, 234-242.—An explanation for Europeans of Watson's early behaviorism and Pavlov's reflexology, with a slight historical background. The author considers both valuable contributions, but not complete systems.—*R. G. Sherwood* (Redmond, Wash.).

790. Sacristán, J. M. *Las relaciones entre la psicología y la psiquiatría, según el criterio de A. Kronfeld*. (The relations between psychology and psychiatry according to the criterion of A. Kronfeld.) *Arch. de neurobiol.*, 1932, 12, 295-315.—A short exposition of the different schools and methods used in present-day psychology, based on A. Kronfeld's works. A brief explanation is given of the psychology of motion, elementary psychopathology, the psychopathology of behavior, of work, of modes of expression and reactions, descriptive, functional,

and dynamic psychopathology. Science requires the knowledge of various points of view on the subject. A single point of view will lead to limitations and narrow-mindedness not only in methodology but also in the interpretation of phenomena. An abnormal psychic accident is abnormal according to the same laws as the abnormal somatic accident. The psychic processes, like the physical ones, are vital manifestations of the organism.—*E. Johns* (New York City).

791. Sarma, R. N. *Indian psychology*. Sanskrit sources surveyed. *The Hindu*, n. d.—A review of the main conclusions of the realistic psychology of the Nyaya. "The Nyaya are primarily concerned with an elaborate scientific examination of the nature of knowledge, and their interest in psychological pursuits will naturally be restricted to perception and to knowledge of external reality, adjustment to which is the law of life and the essence of existence, animal and human."—*B. Casper* (Clark).

792. Sarma, R. N. *Indian psychology*. Sanskrit sources surveyed. *The Hindu*, n. d.—A brief summary of the essentials of the realistic psychology of the Vaisheshika, together with a comparison between it and that of the Nyaya school.—*B. Casper* (Clark).

793. Sarma, R. N. *Indian psychology*. Sanskrit sources surveyed. *The Hindu*, n. d.—A brief account of the leading doctrines of the Sankhya school of psychology based upon Sanskrit sources. The Sankhya "has constructed an elaborate (naively) realistic psychology of its own, strongly tinged no doubt by its basic metaphysical dualism." It is behavioristic. Life consists of a series of responses to stimuli impinging on the organism from external reality. It is dualistic in that the Sankhya admits the "existence of a spiritual principle to render intelligible and consistent the behavior of the human organism."—*B. Casper* (Clark).

794. Schmidt, E. *Behaviorismus, Psychologie des Verhaltens, Amerikas neuste Psychologie*. (Behaviorism, the psychology of conduct, America's newest psychology.) *Zsch. f. Religionspsychol.*, 1932, 3, 129-136.—(1) The connection between behaviorism and earlier psychology. (2) Watson's psychology on the basis of his two main works. (3) Criticism. It is a question of the mechanizing of the nature of education, "in the same way that it has always in the past relied on materialism as a gross mechanism."—*A. Römer* (Gautzsch bei Leipzig).

795. Schmitt, O. H. A., & Schmitt, F. O. *A universal precision stimulator*. *Science*, 1932, 76, 328-330.—A method is described for providing stimulation (1) from a self-excited oscillator, capable of stimulating at any desired rate from once every few minutes up to 400 per second, or (2) by means of external excitation from any contact, such as that on the synchronizing rotator usually employed in connection with the oscillograph. A diagram of the circuit is included.—*E. H. Kemp* (Clark).

796. Seelbach, H. *Verstehende Psychologie und Individualpsychologie*. (Understanding psychology and individual-psychology.) *Int. Zsch. f. Individualpsychol.*, 1932, 10, 368-391.—Two more divergent

viewpoints could scarcely have been hit upon for comparison. The "understanding" psychologist presented is the psychopathologist Jaspers. His viewpoint is apparently that of the structuralist, who is concerned frankly with types and abstract concepts, not based upon average or usual cases but upon ideationally constructed concepts. The applicability of the concepts and principles developed is said to be of no concern to Jaspers, who is guided by "science for science's sake" alone. Since he cannot find any help for psychopathology from the current psychology, he develops his own as the needs arise. The result is an abstractly conceived static organization. —*O. N. de Weerdt* (Beloit).

797. [Various.] *Clark University abstracts of dissertations and theses*. Vol. IV. Worcester: Clark University, 1932. Pp. 106.—The psychological section consists of abstracts of the doctor's dissertation of C. V. Hudgins on *Conditioning and Voluntary Control of the Pupillary Light Reflex*, and of the master's theses of C. C. Neet on *Visual Pattern Discrimination in the Macacus Rhesus Monkey* and of Pearl Seekler on *An Objective Analysis of Perseverative Behavior*.—*E. H. Kemp* (Clark).

798. West, C. J., & Hull, C. *Doctorates conferred in the sciences by American universities, 1931-1932*. *Science*, 1932, 76, 296-298.—The Research Information Service of the National Research Council presents information regarding doctorates in science. 1241 doctorates were conferred in the year 1931-1932, of which 104 were in psychology. Tables are given showing doctorates conferred according to universities for the last ten years, and doctorates conferred during 1931-1932 according to universities and subjects.—*E. H. Kemp* (Clark).

[See also abstracts 844, 911, 1158.]

SENSATION AND PERCEPTION

799. Altenburger, H., & Wolff, H. G. *Vestibuläre Beeinflussung der Körpermuskulatur*. (Vestibular influence upon somatic musculature.) *Zsch. f. d. ges. Neur. u. Psychiat.*, 1932, 138, 657-663.—"The behavior of motor chronaxy under vestibular stimulation confirms Ewald's original theory of a direct vestibular influence upon the somatic musculature. It extends primarily to the extensors and abductors, is bilateral, and is eliminated when the vestibulo-spinal tract is severed."—*C. W. Fox* (Rochester).

800. Ames, A., Jr., Gliddon, G. H., & Ogle, K. N. *The importance of the relative size and shape of ocular images in vision*. *Ann. Dist. Service Found. Optom.*, 1932, 12-26.—A description of the various types of differences that may exist between the ocular images of the two eyes, methods of determining their presence, and ways in which they affect the function of vision.—*R. J. Beitel, Jr.* (Clark).

801. Ames, A., Jr., Gliddon, G. H., & Ogle, K. N. *Lenses for changing the size and shape of dioptric images*. *Ann. Dist. Service Found. Optom.*, 1932, 27-36.—A general description of so-called "size-lenses" and also of the effects produced by ophthalmic

lenses in the size and shape of the ocular images.—*R. J. Beitel, Jr.* (Clark).

802. Arneson, T. J. *The new optometry; a new technique for the diagnosis and treatment of muscular imbalances*. Minneapolis, Minn.: Author, 1932. Pp. 190. \$5.75.—*R. R. Willoughby* (Clark).

803. Barwich, M. *Zur Otitis der gegenwärtigen Scharlachepidemie*. (Otitis in the present scarlet fever epidemic.) *Monatssch. f. Ohrenh.*, 1931, 65, 812-827.—In the course of scarlet fever an acute otitis develops in a certain number of cases, and the frequency of this complication depends upon the severity of the epidemic. The otitis may develop throughout the course of the scarlet fever affection, and may be independent of the symptoms of scarlet fever. The extensive destruction of the tympanic membrane observed in the course of severe otitis complicating scarlet fever cannot be prevented by the paracentesis carried out early in the course of the disease. The paracentesis does not prevent the extension of the inflammation to the mastoid process. The otitides of the first 3 weeks of the course of the disease are more unfavorable prognostically, since they lead more frequently to mastoiditis than the so-called late forms. The presence of internal complications contra-indicates an operation. This is especially true for cases showing an involvement of the heart. The absence of tonsils is not an absolute protection against the origin of otitis during scarlet fever.—*A. S. Schwartzman* (Washington, D. C.).

804. Cobb, P. W. *Weber's law and the Fechnerian muddle*. *Psychol. Rev.*, 1932, 39, 533-551.—The relations between Weber's law and Fechner's logarithmic formulation are questioned. If Weber's law is true there can be no absolute threshold; but it is only the approximate statement of a special case and has no universal validity. Fechner's derivation of the *Massformel* is reviewed and an experimental check on his reasoning suggested. It is shown that neglect of the fact of contrast invalidates any attempt to formulate sensation magnitude in terms of the value of a single stimulus from which it is assumed to be derived. For the case of a variable stimulus in invariable surroundings, Weber's law does not hold and the facts are satisfied by a formula totally different from Fechner's *Massformel*. The author stresses the fact that the functions of the special senses would be better understood if differences in magnitude between stimuli juxtaposed in space and time were stressed rather than mere intensity-magnitudes of the given stimulus.—*A. G. Bills* (Chicago).

805. De Parell, G. *Rééducation de l'ouïe*. (Re-education of hearing.) Paris: Doin, 1931.—The author bases his work on the idea that in cases of organic deafness a perceptible improvement of hearing can be attained through exercises in hearing. Such practice is absolutely necessary for deafened children and deaf mutes with remains of hearing. The aim, however, is not so much improvement of hearing as development or retention of speech. A part of the book is devoted to medically directed education of speech-defective children, and the author

deplores the lack of such training in French schools, pointing to Sweden as an example of a country where the hard-of-hearing child is an object of special educational concern.—*M. E. Morse* (Hyattsville, Md.).

806. DeSilva, H. B., & Weber, A. Responsiveness of the blind spot. *J. Exper. Psychol.*, 1932, 15, 399-415.—Subjects were unable to distinguish forms upon the blind spot under the conditions of the investigation. They were never able to see one light stimulus inside of another on the blind spot. This fact indicates that the presence of receptors in the blind spot is doubtful. The totalizing phenomenon seems more important in explaining the filling-in process than presence of receptors in the blind spot. Ophthalmologists have never discovered receptors in the blind spot. Surrounding receptors play a greater part in the totalizing function than does the responsiveness of the optic nerve trunk to light. There is no qualitative difference between a near liminal light on the blind spot and a near liminal light on the fovea. Stimuli falling on the periphery of the blind spot are seen more easily than stimuli falling on the center. Adaptation takes place on the blind spot as it does on the retina proper. The integrative adjacent receptor theory fits the facts of responsiveness of the blind spot better than does the postulation of receptors located within the blind spot.—*S. Renshaw* (Ohio State).

807. Ferree, C. E., & Rand, G. The transition from day to night lighting. *Person. J.*, 1932, 11, 237-254.—In order to test the current belief that the mixture of daylight and artificial light, as in late afternoon illumination, is undesirable, the following experiments were conducted: (1) A comparison was made of the effect of artificial light, daylight, and mixtures of artificial light with daylight on acuity, speed of vision, power to sustain acuity, and ocular fatigue. In each case intensity of illumination was made the same and the eye was fully adapted to the illumination used. The object was to ascertain the effect of mixture of artificial light and daylight so far as color and composition are concerned. (2) In a second series of experiments the artificial light was turned on at different times in the late hours of the afternoon on different days and the effect on speed of vision was determined. (3) A study was made in relation to the adaptation of the eye, with the object of showing to what extent the eye is rendered deficient in the late hours of the afternoon by its previous exposure to a light of high intensity and by its failure to keep pace by adaptation with the change of intensity. It was found that the mixture of daylight and artificial light is not in itself undesirable, but that a greater total intensity of light is needed during the late afternoon due to the slow adaptation of the eye following brilliant illumination of mid-day.—*J. C. Spence* (Clark).

808. Ferree, C. E., & Rand, G. Relation of size of the pupil to intensity of light and speed of vision, and other studies. *J. Exper. Psychol.*, 1932, 15, 37-55.—Speed of discrimination is not a simple logarithmic function of intensity, but is affected by changes in size of either a natural or artificial pupil.

The pupil contraction is not an important factor in the slow rate of change in speed of discrimination, which takes place with increase of intensity at the higher illuminations. The pupil size is affected by the size as well as by the brightness of the illuminated areas. The intensity range for maximum pupil change is from ten to twenty foot-candles. The maximum efficiency of the eye cannot be obtained below this intensity, which the authors hold to be the natural working intensity for the eye. Speed of work in factories may be increased by increasing the intensity of light when the work is done under controlled conditions.—*S. Renshaw* (Ohio State).

809. Foucault, M. *L'acuité visuelle et l'acuité auditive chez les écoliers*. (Visual and auditory acuity in students.) *Rev. de psychol. appl. de l'Est*, 1932, 2, 155-168.—The author gives facts and tables in reporting his work of several years in testing the auditory and visual acuity of pupils from the primary schools of Montpellier. The work was carried out because of a belief that a large percentage of retarded pupils are so because of sensory defects. Methods of examination are described in detail.—*E. H. Kemp* (Clark).

810. Friedmann, L. *Eine neue Theorie des Gehörmechanismus*. (A new theory of the hearing mechanism.) *Monatssch. f. Ohrenk.*, 1931, 65, 313-315.—The oscillations of the tympanic membrane and ear ossicles give rise to molecular vibration of the gas particles in the lymph of the labyrinth; it can be conceived that the gas particles undergo independent oscillations without oscillation of the molecules of the fluid and solid substances, the latter remaining in a state of equilibrium. The sound is conducted by condensation and rarefaction of the gas molecules, just as in bone conduction of the skull. The pendulum-like oscillations of the ear ossicles condition molecular wave condensations and rarefactions in the gas of the cochlea. The sound-conducting apparatus is of significance only for the acuity of hearing or for the quantitative ability of hearing, and only for the lower tones. It appears that only the molecular oscillations of the gas of the cochlea represent the unconditionally necessary element for the act of hearing, without which the ability to perceive a tone scale could not exist. An injury to the sound-conducting apparatus alone is not the cause of deaf-mutism, which is always conditioned by an affection of the nervous apparatus. The author's theory harmonizes with the kinetic theory of gases and the views of the physicist van't Hoff.—*A. S. Schwartzman* (Washington, D. C.).

811. Fröschels, E. *Ueber eine wenig beachtete Komponente des mangelhaften Sprachgehörs bei Schwerhörigen und ihre Bedeutung für die Hörfähigkeiten*. (A little considered component in imperfect hearing of speech by the deaf and its meaning for exercises in hearing.) *Monatssch. f. Ohrenk.*, 1932, 66, 454-461.—Speech sounds are composed of a complicated configuration of single tones, the complexity of which does not come to consciousness, but is nevertheless a fundamental function of normal hearing. If reception of these partial tones is imperfect, as in

deafness, the understanding of speech is disturbed. The total structure of the sound is changed and a different sound-picture arises, which, if the quantitative and qualitative changes are too great, cannot be identified with former sound-memories. The object of systematic practice in hearing is to identify these new forms with the earlier learned speech. It is actually possible thus to bring back the understanding of speech (manifested in tests as increased hearing); and to give speech to deaf mutes. Undoubtedly, many of the latter hear speech in a different way from ours, but we know nothing of the qualitative peculiarities of the sounds they perceive, because we cannot study accurately the partial tones. As these changed sounds, however, are heard in a constant way, an understanding of speech can be built up on this basis. The purpose of hearing therapy is to make these complexes available for speech. Since this involves the acquisition and training of a central function, it is applicable if any hearing remains, without regard to the actual organic defect.—*M. E. Morse* (Hyattsville, Md.).

812. Nelson, H., & Judd, D. B. A study of photopic adaptation. *J. Exper. Psychol.*, 1932, 15, 380-398.—When other factors are held constant eye movements alone are sufficient to arrest adaptation, so that complete adaptation with total loss of chroma does not occur. With the moving eye and general stimulation the process of adaptation is confined to a brief interval after which no change is discernible. Rhythmic effects, at present unaccounted for, may be observed with colored glasses. Complete adaptation with colored glasses (in which objects resume their material appearance) occurs only with weakly selective glasses. The results add fresh evidence against the Hering theory with its concept of a mid-gray quality as the end result of adaptation. The laws of adaptation as classically stated must be revised to include facts of observation and of physics, or stated with reference to the conditions under which they are valid. Features of normal vision like eye movements and general stimulation should be taken into account.—*S. Renshaw* (Ohio State).

813. Howard, L. O. Some human eye-spots classified zoologically. *Science*, 1932, 76, 409.—The author, a biologist who has been compelled to rest his eyes, relates that he has interested himself in "classifying his eye-spots." He has recognized three species of insects among the curious shapes which float before his eyes.—*E. H. Kemp* (Clark).

814. Ishihara, K. Zur Anatomie der Taubheit infolge von Meningitis cerebrospinalis. (Anatomy of deafness due to cerebrospinal meningitis.) *Monatssch. f. Ohrenk.*, 1931, 65, 1199-1235.—The author describes the anatomical findings in cases of deafness due to cerebrospinal meningitis: osseous obliteration of the nuclei, with retention of the remnants of the lamella spinalis ossea, and the circumscribed neuroma in the region of the destroyed membranous cochleae; retention of the marginal surfaces of the bony cochleae, and the passage in circumscribed regions of osteophytes into the petrous portion; retention of remnants of the cochlear nerve and

the spinal ganglion; firm mucosa; over-development of the tensor tympani muscle; degenerative atrophy of the labyrinthine nerves and their ganglia in the inner auditory canal; gaps in the tractus spiralis foraminosus; pigmentation of the modiolus, not exceeding normal; pathological pigmentation of the mucosa of the tympanic cavity; numerous striated bodies within the inner auditory canal; the newly formed pathological bone is distinctly different from normal; old hemorrhages in the petrous portion; circumscribed thickening of the dural lining of the inner auditory canal (chronic pachymeningitis); bony obliteration of the cochlear aqueduct and the recessus sphaericus, and of the semi-circular ducts; corpora amylacea in the labyrinthine nerves and ganglia.—*A. S. Schwartzman* (Washington, D. C.).

815. Jaensch, E., & Kleeman, R. Über das Aubert-Foerstersche Phänomen und den Zweikomponentensatz in der Lehre von der peripheren Sehschärfe. (Concerning the Aubert-Foerster phenomenon and the two-component doctrine in the theory of peripheral visual acuity.) *Arch. f. d. ges. Psychol.*, 1932, 84, 521-571.—Detailed descriptions of apparatus (with two illustrations), experimental methods, and results (including 16 numerical tables) make up the bulk of this article, which presents experimental evidence for Jaensch's theory that visual acuity in any part of the retina depends on two factors, viz., the physiological (retinal sensitivity, resolving power of the lens, size of pupil, etc.) and the central (attention). Aubert and Foerster showed that if the eye is fixated on a point and objects are brought slowly into the field of view until they are discernable, a small object near the eye can be distinguished sooner than a large distant object subtending an equal visual angle in the same area of the retina. Jaensch showed that physiological factors cannot account for this, but that it can be explained by the fact that the fixation point and the object must be held together in the same field of attention and that this field of attention need not be so large in the case of a small object near at hand. The finer the criterion, the more striking the phenomenon becomes. Various experiments here reported deal with indirect and direct vision, with continuous and instantaneous presentation of stimuli, and with the dependence of peripheral visual acuity upon the belonging of a part to a whole. Jaensch classified his observers in these experiments in accordance with his familiar personality types, and found that with instantaneous presentation of stimuli the Aubert-Foerster phenomenon appeared more strikingly among those who were externally integrated than among those who were disintegrated or were internally integrated.—*M. F. Martin* (West Springfield, Mass.).

816. Jaensch, E. R., & Kretz, A. Auseinandersetzung in Sachen der Eidetik und Typenlehre. IX. Experimentell-strukturpsychologische Untersuchungen über die Auffassung der Zeit unter Berücksichtigung der Personaltypen. (Problems in eidetics and typology. IX. Experimental structure-psychological investigations of the apprehension of time with special reference to personal types.) *Zsch.*

f. Psychol., 1932, 126, 312-375.—Standard experiments on the comparison of short and long time intervals under different conditions were made with the help of a Schumann time-sense apparatus. The 8 observers used were selected so as to afford a wide range of typical differences in degree of integration (Jaensch). It was found in general that there are typical differences in the experience of time corresponding to the typical differences in the experience of space. The more highly integrated individuals proved more susceptible to temporal distortion and less capable of apprehending time as an abstract reality apart from its content. Certain conclusions bearing upon the Bergsonian doctrine of time are drawn. Observations with reference to the rôle of length of interval, presence or absence of pause, subjective and objective accent, and filling of interval were made, confirming in general the results of earlier investigations. The literature on the time sense is not taken into account.—R. B. MacLeod (Cornell).

817. Josey, C. C., & Miller, C. H. Race, sex, and class differences in ability to endure pain. *J. Soc. Psychol.*, 1932, 3, 374-376.—Results of a questionnaire sent to 120 physicians and dentists. 11 groups are ranked on the basis of from 9 to 35 judgments each. 70% of 60 judges believe women are superior to men, and an equal number believe the laboring class is superior to the well-to-do in ability to endure pain.—E. B. Newman (Harvard).

818. Kompanejets, S. Das Hörvermögen eines 116-jährigen Greises. (The hearing of a 116-year-old man.) *Monatssch. f. Ohrenhk.*, 1932, 66, 470-472.—Opinions differ as to the anatomical cause of the deafness of old age. The prevailing theory is that it is due to rigidity of the basilar membrane which increases progressively from the tip to the base of the cochlea, where it is immovable. This explains the poor perception of high tones which is usual in old age. The author had the unique opportunity to test the hearing of a 116-year-old man who was in good physical health and still in possession of his mental powers, and who had never had any aural disease. Kompanejetz found a reduction in the perception of all tones, greater in the lower than in the higher parts of the scale. This proves that the usual hypothesis does not hold in all cases. It also disproves the theory that the fibers of the membrane in the basal convolution of the cochlea become rigid and lose their function earlier because of the greater demands on them on account of the more frequent vibrations of the higher tones. On the basis of this case, the author summarizes the clinical characteristics of presbyacusia as follows: decrease of bone conduction, especially for higher tones; a narrowing of both auditory thresholds; a uniform decrease of acuity for all tones of the scale.—M. E. Morse (Hyattsville, Md.).

819. Körner, O. Die Sinnesempfindungen im Ilias und Odyssee. (Primary sensations as described in the Iliad and Odyssey.) *Jena med.-hist. Beitr.*, H. 15; *Monatssch. f. Ohrenhk.*, 1932, 66, 510-511.—

Gladstone pointed out in the middle of the last century that Homer mentioned only a few colors, and often used the same word for different shades of the same color. He concluded that the poet wished to emphasize prismatic colors less than gradations of shade. Körner has published a series of works on Homer. The present book is concerned with the still disputed interpretation of the descriptive terms for sensations of color, hearing, smell, taste, and general sensation, as found in the Iliad and Odyssey. The author bases his explanation of the paucity of color words on meteorological and climatic conditions. The dazzling sunlight characteristic of the regions involved explains the predominance of light-and-shade words over color words. Remarkable, however, is the fact that all reference to the color of vegetation—green—is lacking, perhaps because the color was seldom seen in that parched land. Imitative words for sounds are much more abundant, but one must beware of misinterpretation, because we have no accurate knowledge of the language of the Homeric Greeks. Descriptive terms for sensations of smell and taste and for general sensation are numerous.—E. Ertl (Vienna).

820. Madigan, L. F., & Carleton, E. H. A clinical report of the correction of differences in the size and shape of ocular images. *Ann. Dist. Service Found. Optom.*, 1932, 37-63.—A study of the type of case treated in the clinic. Data are presented on 140 cases. Conclusions: (1) Differences in size of the ocular images of the two eyes may exist without causing discomfort, but in such cases the differences are less than where there is discomfort. (2) Differences in size of the ocular images associated with discomfort are found in persons of all ages, with emmetropia as well as with all types of refractive errors, with orthophoria as well as with all types of heterophoria. (3) The symptoms associated with difference in size of the ocular images are of two types: first, of a general type such as headache and stomach disorder, apparently involving the sympathetic nervous system; second, of a localized ocular type, such as photophobia, suppression, tiring, burning, tension of eyes and disabilities, such as difficulty in using the eyes in reading, automobile or train riding, etc. (4) Correction of size differences apparently brought complete relief in about 25% of such cases, partial relief in 56% and no relief in 19%.—R. J. Beitel, Jr. (Clark).

821. Obata, J., & Morita, S. On the accuracy of the aural method of measuring noises. *J. Acous. Soc. Amer.*, 1932, 4, 129-137.—Analysis of noise measurement data obtained on electric cars in Tokyo indicates that the aural method of measurement (utilizing noise meters and audiometers) is highly accurate if conducted with care. Distribution curves of the errors reveal that errors are greater when the noises vary rapidly in intensity or quality. Fatigue does not seem to increase the errors of observation; rather, the errors become smaller with the passage of time under identical noise conditions; however, new noise situations increase the errors again.—P. E. Huston (Worcester State Hospital).

822. **Pikler, J.** Zur Geschichte der Metzgerschen "paradoxa Helligkeitserscheinung." (On the history of Metzger's "paradoxical brightness phenomenon.") *Zsch. f. Psychol.*, 1932, 126, 385-386.—The phenomenon reported by Metzger in *Psychol. Forsch.*, 1932, 16, had already been discovered by Mach, and has been recently reported in detail by the author.—*R. B. MacLeod* (Cornell).

823. **Rejtö, A.** Über das Richtungshören. (The direction of hearing.) *Monatssch. f. Ohrenhk.*, 1931, 65, 959-966.—Binaural hearing must be considered as the basis of the direction of hearing, and through the difference in the intensity, in time, and even in the phase, the right or left direction can always be found. The finding of the other directions may be facilitated by changing the direction of the head, i.e., of the ears; during this process, however, those movements of the ocular muscles which originate from central reflexes or from a direct stimulus of the labyrinth cannot always be excluded.—*A. S. Schwartzman* (Washington, D. C.).

824. **Robinson, F. P., & Murphy, P. G.** The validity of measuring eye movements by direct observation. *Science*, 1932, 76, 171-172.—The authors describe experiments executed to determine the validity of the method of direct observation in counting fixations as a measure of eye movements. The two clinicians, M and R, photographed the eye movements of poor readers as they read given selections. At the same time the eye movements were counted by direct observation. From the records three scores were computed for each reader: (1) actual number of eye movements (photographed), (2) number counted by direct observation, and (3) time of reading. On a basis of the standard error of estimate and from intercorrelations of the above variables it was shown that M could predict photographed values 28% better by using time as a measure than by using the number counted. R could predict 7% better on a basis of time. Various factors influence the counting of eye movements. At periods there was a tendency to count more movements than actually occurred, though M usually counted only 77% of the number photographed while R counted 85% of the total number. The zero order correlations show that both time and number counted are fair measures of the actual number of eye movements. Time, however, gives a better prediction than number counted, but for an accurate measure of the number of movements photography should be used.—*C. C. Neet* (Clark).

825. **Sternberg, H.** Zur Bekämpfung von Parosmien (Kakosmien) durch intravenöse Injektionen von Geruchsempfindung erzeugenden Substanzen. (The treatment of parosmia by intravenous injection of odoriferous substances.) *Monatssch. f. Ohrenhk.*, 1931, 65, 171-172.—The author describes two patients suffering from a slight degree of atrophic rhinitis associated with parosmia; two intravenous injections of camphor-quinine were followed by considerable improvement in the parosmia.—*A. S. Schwartzman* (Washington, D. C.).

826. **Thomson, E.** Memorandum regarding a family in which neuro-retinal disease of an unusual

kind occurred only in the males. *Brit. J. Ophth.*, 1932, 16, 681-686.—In a family of four boys and four girls (age range 8-25 years approximately), the four males were found to have exceptionally poor vision, while the females were apparently unaffected. In the four males the R.V.A.'s are respectively 6/36, 6/18, less than 6/60, 6/12 attempts; the L.V.A.'s are 6/36, 6/24, 6/24, 1/60. The best binocular corrected V.A.'s are 6/18, 6/18, 6/24, 6/12 (?). In all four there was an unusual macular condition in at least one eye. The details of the visual defect and the fundus appearances are given in the abbreviated case histories appended. These histories are incomplete, but taken as a whole they indicate a sex-limited neuro-retinal disease with a tendency, as shown in the case of one of the males, to the formation of scar tissue in the retina, with resultant detachment. There is no question of mental defect in any of these cases.—*R. J. Beitel, Jr.* (Clark).

827. **Thurstone, L. L.** Stimulus dispersions in the method of constant stimuli. *J. Exper. Psychol.*, 1932, 15, 284-297.—A method is developed for numerically evaluating the stimulus dispersions for stimuli that have been presented by the constant method. Description of the experimental data and two cases under which they may be treated are presented. A procedure is presented for obtaining the approximate value for the dispersion of each stimulus. A criterion for determining whether the simpler form of Case V or the more laborious Case III should be used for an experiment conducted by the constant method is given. The greater the deviation of the stimulus dispersion from the average dispersion, the greater will be the error caused by the principal assumption of Case V and the greater will be the discrepancies between experimental and calculated data.—*S. Renshaw* (Ohio State).

828. **Woodrow, H.** The effect of rate of sequence upon the accuracy of synchronization. *J. Exper. Psychol.*, 1932, 15, 357-379.—By means of a chronoscopic set-up it was found that the temporal rate of one sound in 800 sigma resulted in the smallest variation in the errors of synchronization. As practice continued the subjects became adapted to the rates, which extended from 666.7 sigma to 1000 sigma. The upper limit of synchronization lies near the rate of one sound every 3.34 seconds. Constant errors showed little dependence upon rate in regard to either their magnitude or their direction. Variation in performance, aside from the effect of rate, was pronounced from one sitting to another. Introspections showed that the task of synchronizing is a different kind of task at the two slowest rates used than at the faster rates.—*S. Renshaw* (Ohio State).

[See also abstracts 846, 876, 878, 885, 1001, 1041, 1094, 1110.]

FEELING AND EMOTION

829. **Harlow, H. F., & Stagner, R.** Psychology of feelings and emotions. *Psychol. Rev.*, 1932, 39, 570-589.—A new interpretation is given to the controversy over emotions by identifying the conscious dif-

ferentiating aspect of the emotions with the feelings. Four differentiable feelings are recognized: pain-unpleasantness, pleasure-pleasantness, excitement, and depression. In accord with the Cannon theory, the anatomical seat of these processes is assumed to be projection areas of the thalamus. Pain and unpleasantness are assumed to differ only in degree, as are also pleasure and pleasantness. The characteristic tone of the emotions is supposed therefore to result from these affective components. This would account for the failure to find visceral or behavioral differentia for the emotions, and would not throw the whole burden of differentiation on the perception of the stimulus situation.—A. G. Bille (Chicago).

830. Scheler, M. *Die Sinngesetze des emotionalen Lebens. Band I: Wesen und Formen der Sympathie. Die Phänomenologie der Sympathiegefühle.* (The intrinsic structural laws of the emotional life. Vol. I: The essence and forms of sympathy. The phenomenology of feelings of sympathy.) (3rd ed.) Bonn: F. R. Cohen, 1931. Pp. xiv + 307. RM. 9.00.—In addition to the causal laws and psycho-physical dependences of the emotional life, the "higher" emotional acts and functions reveal certain laws of intrinsic structure (*Sinngesetze*). These may be considered under three headings: (1) Sympathy (*Mitgefühl*) in the sense of feeling the same emotion as or taking part in the experience of another, is to be distinguished from a mere understanding re-feeling (*Nachfühlen*). (2) In contradistinction to sympathy, love and hate are not essentially social acts, but rather affective expressions, in which every concrete individual object which possesses value is assigned its highest or lowest possible value. (3) The intuitive apprehension of other selves (*Du-Evidens*) is the result not of inference by analogy, nor of sympathy, but of inner perception, and is to be considered as just as immediate and as mediate as the apprehension of one's own self. Each of these acts is discussed in relation to the others and in relation to its genesis.—Bäcker (Dortmund).

831. Whitehorn, J. C. Concerning emotion as impulsion and instinct as orientation. *Amer. J. Psychiat.*, 1932, 11, 1093-1106.—The author, in the interest of research, attempts "a clearer delineation of concepts than is currently followed in psychiatric discussions, namely, to restrict the term instinct to signify observable patterns of activity, presumably innate, and to formulate emotion as a general supplementary biological function rather than the psychic parallel of instinct." He acknowledges his debt to Lloyd Morgan, Claparède, and Shand. He summarizes: "A few implications of the foregoing formulations and definitions may be made explicit here as indicating the points of divergence from, and agreement with, current systems of psychology. Instincts are considered as action patterns, oriented to fill biological needs; the most fundamental determinants of directed conduct, but not 'sources of energy.' These action patterns are not assumed to be completely stereotyped or immutable, but their modification is attributed to intelligence rather than to some power latent within the instinctive disposition itself. Emo-

tion is here conceived not as a psychic parallel or epiphenomenon of instinct, but as complementary or reciprocal thereto. Real biological significance is here attributed to the impulsion experience as the basis of emotion, the interrupter of inadequate attitudes." Bibliography.—S. J. Beck (Boston Psychopathic Hospital).

[See also abstracts 838, 874, 1107.]

ATTENTION, MEMORY AND THOUGHT

832. Barr, A. S., & Park, J. S. An experimental study of functional learning. *J. Exper. Educ.*, 1932, 1, 9-18.—The purpose of this investigation was to study the relative amounts of learning by subjects when two equally difficult artificial alphabets were learned by direct memorization and by incidental learning. The following results were obtained: (1) Direct learning is about 57% more efficient than incidental learning, the difference in favor of the former being 6 times its standard error. (2) There is a marked difference in the trend of the learning curve for each method of study. (3) There is a considerable practice effect from one method to the other, resulting from having studied the equivalent alphabet previously. (4) When practice effect is held constant, results show that direct memorization is more effective than incidental learning by 74% for the first application and 43% for the second, the critical ratios being approximately 4 in both cases. (5) The recall method of testing the learning of the alphabets shows a more consistent curve than the recognition method. (6) There is a moderately low correlation (.391) between the number of symbols learned and the knowledge of the content of the material translated by the incidental method. (7) There is a very low correlation between the intelligence of the subjects and the number of symbols learned by either method. (8) The incidental method was found to be more fatiguing than direct memorization, under the conditions of this experiment.—H. W. Karn (Clark).

833. Biegel, R. A., & de Vries, M. J. Die Prüfung des überlegten Reagierens. (The testing of choice reactions.) *Psychotechn. Zsch.*, 1932, 7, 117-120.—Poppelreuter constructed an apparatus for measuring choice reaction times. Since this apparatus has no device for registering the reactions and for measuring the reaction times, it was rebuilt by the central telegraphy shops in Haag (Holland). The authors give a description of the apparatus before and after the change, and report the method and procedure for using it.—C. Burri (Chicago).

834. Carmichael, L., Hogan, H. P., & Walter, A. A. An experimental study of the effect of language on the reproduction of visually perceived form. *J. Exper. Psychol.*, 1932, 15, 73-86.—Recall of visually perceived form is altered by the fact that a particular word is said immediately before the visual presentation of the form. A list of stimulus figures was presented, each figure being given after one of a pair of words. The words influence perception of figure. The list word, e.g., "eye glasses," is assumed to start certain processes in the organism which are possible

because of the experience of the subject with "eye glasses" as word or as object. These physiological processes cause the figure of two visual circles connected by a line to be reproduced in a different manner. If the word "dumbbell" were spoken before this presentation, different processes would be initiated, hence a different reproduction or a new total process would result. The reproduction is a complex total and not either of its component processes.—*S. Renshaw* (Ohio State).

835. Dulaky, S. G. Discussion: What is a distractor? *Psychol. Rev.*, 1932, 39, 590-592.—A way is suggested out of the confusion resulting from the fact that so-called distractors sometimes do and sometimes do not lower efficiency, by using the term distractor to refer only to instances in which the stimulus in question does lower efficiency of performance, without reference to hypothetical effects on attention.—*A. G. Bills* (Chicago).

836. Lumley, F. H. Anticipation of correct responses as a source of error in the learning of serial responses. *J. Exper. Psychol.*, 1932, 15, 195-205.—The investigation indicates that errors of anticipation of responses, which would be correct farther along in the series, are factors in the selection of the true response and the elimination of errors. The author's investigation shows that the end of the series is learned more quickly than the middle, and that anticipation of units in the first part of the series is in inverse proportion to the remoteness of these units from the point of choice. The ratio of the far anticipations to the near anticipations is decreased as learning progresses. An analysis of the data of ten other investigations relative to the factor of anticipation shows a similar relation of time errors to remoteness from the point of choice.—*S. Renshaw* (Ohio State).

837. Lumley, F. H. Anticipation as a factor in serial maze learning. *J. Exper. Psychol.*, 1932, 15, 331-342.—These experiments were conducted in an examination of the tendency of subjects in learning a maze or series of letters to anticipate responses which would be correct farther along in the maze or series. In all three experiments the subjects worked on the learning problem at one sitting. In the first experiment 25 subjects learned 15 two-place numbers. The second experiment consisted of learning a paper maze by 25 subjects. In the third the subjects learned a foot maze. Errors found in serial learning are looked upon as the same approximation and correction made upon a time dimension instead of a space plane, as is the case in aiming in the Dodge ocular pursuit experiment. Ratios of far anticipation are given for successive periods of the learning problem. The approximation and correction type of learning is clearly demonstrated by diminishing ratios. Approximation became better as learning progressed. The previous findings by the same author are confirmed. Subjects tend to anticipate responses which would be correct farther along in the series, and those responses which would be correct in the near future are anticipated more often than those which would be correct in the distant future. As a subject learns a serial

problem more and more near anticipations are made in comparison with the number of far anticipations.—*S. Renshaw* (Ohio State).

838. Lynch, C. A. The memory values of certain alleged emotionally toned words. *J. Exper. Psychol.*, 1932, 15, 298-315.—The recognition method of obtaining memory scores for sixteen words selected from Jung's list was used in a check experiment. There is a fair degree of correlation between the memory scores found in this experiment and the P. G. R. values obtained by Smith and Jones. Evidence does not support the theory of bi-directional effect of emotional influence in recall. The recognition method is more efficient than the reproduction method, especially with words not emotionally toned. No significant sex differences are evident except for specific emotionally toned words. Relative position of words in the list affected their respective scores, particularly the non-critical words.—*S. Renshaw* (Ohio State).

839. Pessin, J. The effect of similar and dissimilar conditions upon learning and relearning. *J. Exper. Psychol.*, 1932, 15, 427-435.—The relative efficiency, as measured by the Ebbinghaus saving method, of similar and dissimilar learning and relearning conditions was studied. The conditions used were: (1) a combined auditory and visual stimulation, and (2) a state of relative quiet. No significant differences were found in the percent saved during relearning under the various conditions devised in this experiment. The ability of human beings to adapt themselves to a change in the environmental situation is pointed out. The subject talked more loudly, made more overt movements, and expended more energy during the combined visual and auditory stimulation.—*S. Renshaw* (Ohio State).

840. Reed, H. J. The influence of a change of conditions upon the amount recalled. *J. Exper. Psychol.*, 1932, 15, 632-648.—The subjects memorized under three different conditions, viz., posture, sensory mode of presenting stimulus words, and form of response during the practice. Learning scores are influenced by posture, the tendency being slightly in favor of the seated position. The auditory sensory mode was preferable in the group in which that comparison was made. The form of response (speaking or writing) in the trials is not related to learning scores. Recall scores are unaffected by shift to a different posture at the time of recall, or by a change in the response. On the other hand, recall scores are lowered by a change in the sensory mode at the time of the recall tests.—*S. Renshaw* (Ohio State).

841. Tinker, M. A., Imm, A. J., & Swanson, C. A. Card sorting as a measure of learning and serial action. *J. Exper. Psychol.*, 1932, 15, 206-211.—The problem involves the determination of the reliability of performance, the relation between performances, and progress in learning for five different methods of card sorting. Speeded measures for distributing cards by 45 subjects were made. Progress in learning was affected by (1) changes in motor sequence, (2) complexity of choice.—*S. Renshaw* (Ohio State).

842. Van Ormer, E. B. Retention after intervals of sleep and waking. *Arch. of Psychol.*, 1932, No. 137. Pp. 49.—The object of the study was to obtain further information regarding the effect of sleep upon retention. The author and his wife acted alternately as subject and experimenter. The material was nonsense syllables of three letters. The rate of presentation was $1\frac{1}{2}$ seconds per syllable. The night learning occurred between 11 P.M. and 12.30 A.M., the day learnings between 9 A.M. and 10.15 A.M. The relearning occurred at designated time intervals following the learning, the times for relearning for the sleep periods being on the average about 12.30, 1.30, 3.30, 7.30 A.M. and for the waking periods 10.30, 11.30 A.M., 1.30, 5.30 P.M. In studying diurnal variation in learning performance, reliable differences were found between 9.30 A.M. and 11.30 P.M. The retention curves of nonsense syllables for periods of sleep and waking coincided at 1 hr.; thenceforth the sleep curve is a practically horizontal line up to 8 hrs., with the waking curve falling away from the former after the 1 hr. interval at an angle of 20 to 30 degrees, slowing off appreciably after the 2 hr. interval, but failing to show any appreciable slowing off at the 4 hr. interval. The usual amount of sleep, 8 hrs., favors retention of nonsense syllables over that time interval. Assuming that there is little or no decrease in learning efficiency at the late evening hours, the advantage of night study, as suggested by others, becomes evident. The results of these studies on sleep and retention combined with recent work on retroactive inhibition necessitate a revision of the law of disuse. It is quite possible that forgetting is a function of the nature of the interpolated experience, the altered environment contexts, and the organic state of the individual during and subsequent to learning, rather than intrinsically a function of the period of disuse.—E. M. Achilles (Columbia).

843. White, G. C. The form of the curve of memorizing. *J. Exper. Psychol.*, 1932, 15, 184-194.—Is there any significant difference between the amounts learned in successive quarters of the time spent in learning twenty-five lists of twelve nonsense syllables? The anticipation method was used. The curves are "negatively accelerated to the seventy-five percentile point, but show positive acceleration in the final quarter." The first quarter gives largest returns when measured by recall. In general the results agree substantially with the previous studies of Robinson, Darrow, G. M. Peterson, Kjerstad, and Heron.—S. Renshaw (Ohio State).

[See also abstracts 884, 1126.]

NERVOUS SYSTEM

844. [Anon.] The Nobel prize in physiology and medicine for 1932. *Science*, 1932, 76, 427-429.—A brief summary of the work of Charles Scott Sherrington, Waynflete professor of physiology at the University of Oxford, and Edgar Douglas Adrian, Fellow professor of the Royal Society at Cambridge, to whom the Nobel prize in physiology and medicine for 1932 has been jointly awarded for their analysis

of the functional activity of the neurone.—P. Seckler (Clark).

845. Braunmühl, A. v. Allgemeine Fortschritte der Histopathologie. (General advances in histopathology.) *Fortsch. d. Neur., Psychiat. u. Grenzgeb.*, 1932, 4, 416-424.—Recent researches in neuropathology demonstrate how completely this specialty has developed its peculiar aims and problems. Braunmühl reviews the question of local predilection of pathological processes in the central nervous system, with special reference to Ammon's horn and the inferior olive. The known factors influencing local vulnerability are fiber systems, vascular distribution, and the cerebrospinal fluid. Obviously, other factors exist, but as yet they elude definition. Embryonic factors and local peculiarities of metabolism may be important. Possibly the experimental method will bring new viewpoints in this problem, but such physico-chemical studies in the nervous system are both difficult and rare. Recent researches on the glia are also discussed. New technical methods have been reported, but apparently no essential advance has been made in the well-recognized debated questions. Attempts have been made to study the morphology and evolution of microglia by means of tissue cultures. According to some investigators, microglia shows all the characteristics developed in cultures by macrophages and monocytes, and the striking similarity of cultures of microglia and reticulo-endothelium is emphasized. In both these interpretations, however, caution is indicated. A bibliography of German, French, English, and American articles, 1927-1931, is given.—M. E. Morse (Hyattsville, Md.).

846. Foerster, O., & Loewi, M. Ueber die Beziehung von Vorstellung und Wahrnehmung bei Schädigung afferenter Leitungsbahnen. (The relation between idea and perception in cases of injury of afferent conducting paths.) *Zsch. f. d. ges. Neur. u. Psychiat.*, 1932, 139, 658-693.—Following a section of the ventro-lateral region of the spinal cord to eliminate gastro-intestinal pain, a patient lost sensitivity to pain and temperature in the parts of the body served by the part of the cord below the section; sensitivity to contact, pressure, vibration, movement and place remained. When the patient was given pain stimuli and instructed to report pain or no pain, deep pain stimuli were reported as painful. When temperature stimuli were applied and the patient was instructed to report cold or warm, all answers except two (out of 17 in all) were right. Repetitions of the experiments gave similar results. In later series, reports on temperature (with instructions to report on temperature) were 100% right. Another patient was examined after a similar operation. There is evidence of an autochthonous cortical excitation in addition to the peripherogenetic excitations in the cases of delimited instruction. Through the cortical excitation complex corresponding to the idea (of pain, etc.) there is created in the cortical sensory field a change of state which, as it were, opens the field to peripherogenetic excitations. The physical processes (corresponding to the ideation and

perception) are to be considered as functionally interrelated. The present experiments offer grounds for the view that perception is an active process.—*C. W. Fox* (Rochester).

847. Gellerstedt, N. *Histologiska iakttagelser över funktionen hos plexus chorioideus.* (Histological observations on the function of the choroid plexus.) *Svenska läkart.*, 1932, 29, 1169-1173.—The writer presents clinical evidence from 30 senile brains, of which 14 or approximately 50% showed structures which in his opinion must have secretory function. The three existing theories of the function of the choroid plexus are briefly discussed.—*M. L. Reymert* (Mooseheart Laboratory for Child Research).

848. Hill, A. V. A closer analysis of the heat production of nerve. *Proc. Roy. Soc. Lond. B*, 1932, 3, 106-164.—The heat production of stimulated frog nerve has been studied with improved and very much more sensitive technique. It is demonstrated that "initial" heat exists as a separate entity. The "initial" heat in a single isolated impulse at 0° C. is 0.26 microcalorie per gram; at 20° C. it is not greater than 0.067 microcalorie per gram. The greater heat at the lower temperature is probably connected with the greater duration of the single response. At 0° C. a maximum response occurs at 30 shocks a second; at 20° C. not below 400 a second. In prolonged stimulation at 20° C. the rate of heat production goes on rising for a long period, and recovery is not complete for an hour. In prolonged stimulation at 0° C. the rate of heat production soon reaches a maximum; there is no steady state, but the response diminishes as stimulation continues. The absence of oxygen causes a progressive fall in the size, but no change in the shape of the heat response to stimulation. This is additional evidence for the existence in nerve of some form of oxidizing reserve. Possible explanations of "initial" and "recovery" heat are discussed.—*F. C. Bartlett* (Cambridge, England).

849. Hoff, E. C. Central nerve terminals in the mammalian spinal cord and their examination by experimental degeneration. *Proc. Roy. Soc. Lond. B*, 1932, 3, 175-188.—The synapses in the spinal cord of the cat are studied. It appears that the small loops or "boutons" which occur on the cell and dendrite surfaces are to be regarded as interconnections or synapses between neurons. The method of experimental observations furnishes a way of tracing the terminations of nerve fibers in the C.N.S. There is apparently no direct termination of afferent fibers of ventral horn cells of the same side, and no direct crossing to the opposite side.—*F. C. Bartlett* (Cambridge, England).

850. Lange, M. Orthopädie und Neurologie. (Orthopedics and neurology.) *Fortsch. d. Neur. Psychiat. u. Grenzgeb.*, 1932, 4, 491-500.—A review of the literature in the fields of orthopedics and neurology. The studies are concerned with the constitution and inheritance of nervous disorders, the treatment

of spastic paralyses, the treatment of injured motor nerves, and neuropathic diseases of the joints. There is a bibliography.—*D. S. Oberlin* (Bryn Mawr).

851. Lapicque, L. *La chronaxie et sa signification physiologique.* I. (Chronaxy and its physiological significance. I.) *Scientia*, 1932, 52, 223-233.—Each kind and condition of tissue has its own way of appreciating time. This is measured by the convention of chronaxy. The lowest intensity of a constant current which can excite a tissue, under the conditions of the experiment, is called the rheobase; then with twice the intensity of the rheobase, one experiments to find the duration strictly necessary to excite. This is the chronaxy. Excitability is a result of the relations between the duration and potential of the stimulus, and can be obtained from observing neither one alone. Historically, DuBois Raymond, Gotch and MacDonald, and Bucicke are mentioned. La Salle has theoretically indicated that the amount of energy required is related to chronaxy. Chronaxy and its relation to essential nervous function will be discussed in Part II.—*R. G. Sherwood* (Redmond, Wash.).

852. Rose, M. *Die vergleichende Zytarchitektonik des Stirnhirns und ihre Beziehung zur Physiologie und Klinik.* (The comparative cytoplasmic structure of the forebrain and its relation to physiology and clinical work.) *Fortsch. d. Neur., Psychiat. u. Grenzgeb.*, 1932, 4, 501-518.—The work done in differentiating the structures of the forebrain in various animals according to ontogeny and cell structure is reviewed. Implications are made concerning the effect of the differences in anatomical structure on function.—*D. S. Oberlin* (Bryn Mawr).

853. Schwartzbart, A. *Beitrag zur Symptomatologie und Kasuistik latenter otogener Hirnabszesse.* (Contribution to the symptomatology and discussion of latent otogenous brain abscesses.) *Monatssch. f. Ohrenhk.*, 1931, 65, 1236-1244.—The author presents 2 cases and summarizes the symptomatology as follows: paresthesia (sense of formication in the region of the toes); the symptom of bulging of the dura; the behavior of the white blood picture. A thorough study of the finer symptomatology would make possible an earlier diagnosis and would improve the results obtained from the surgical treatment of otogenous brain abscesses.—*A. S. Schwartzman* (Washington, D. C.).

854. Stransky, E. *Zur Vakzinebehandlung der Erkrankungen des Vestibularnerven und seines Endorgans.* (Vaccine treatment of affections of the vestibular nerves and their end-organs.) *Monatssch. f. Ohrenhk.*, 1931, 65, 282-283.—"Vaccineurin," a polyvalent typhoid vaccine, was used in the treatment of affections of the vestibular nerves and their end-organs, with more or less favorable results. Later, a polyvalent streptococcal vaccine was used for the same purpose. Three injections are given, each consisting of 1 cc., containing 2,500,000-10,000,000 bacteria. This method of treatment is exceedingly satisfactory. The complex of dizziness disappears

practically completely in each case.—*A. S. Schwartzman* (Washington, D. C.).

[See also abstracts 859, 891, 985, 1001, 1092.]

MOTOR PHENOMENA AND ACTION

855. Allison, L. W. An experimental study of reflex and voluntary eyelid responses. *J. Exper. Psychol.*, 1932, 15, 56-72.—Difference in reaction time between reflex and voluntary eyelid responses were determined as dependent upon the interval between the various stimuli. Comparisons were made between reactions of voluntary, electrically stimulated, and mechanically stimulated responses. The effect of the refractory phase phenomena on reflex and voluntary response was studied. The two-second interval is most favorable for speed of voluntary eyelid response. Temporal interval between stimuli does not influence the reflex action. Latent period of the reflex varies with the two methods of stimulation. The factor which appears to determine speed of reaction time functions independently with respect to the methods of stimulation used.—*S. Renshaw* (Ohio State).

856. Anokhin, P. [The importance of the simultaneous continuance of conditioned and unconditioned stimuli.] *Nijegorodsky medizinsky jurnal*, 1932, No. 1, 31-35.—The duration of the coincidence of conditioned and unconditioned stimuli was made different by the author, who produced additions to this "extinction by reinforcement," i.e., a given conditioned stimulus was applied many times in succession. He finds that the more protracted coincidence of conditioned and unconditioned stimuli strengthens the conditioned reflex, and in this case the extinguishing occurs, therefore, much more slowly.—*P. Anokhin* (Nijny Novgorod).

857. Anokhin, P. [Novelty as a particular stimulus in the disinhibition case.] *Nijegorodsky medizinsky jurnal*, 1932, No. 2, 26-32.—The author extinguished one of the conditioned stimuli (metronome 19 strokes per minute) to the point of complete inhibition of the secretory effect. This serving as a background, another stimulus of equal physiological force addressed to the cortical complexes near it was applied (metronome 200 per minute). As a rule, the application of this new stimulus gave a positive effect, i.e., it produced disinhibition. The author draws a conclusion that novelty in the form of relay of conditioned stimuli is a disinhibitory factor.—*P. Anokhin* (Nijny Novgorod).

858. Anokhin, P. The study of the dynamics of higher nervous activity. I. The active secretory-motor method of studying higher nervous activity. *Nijegorodsky medizinsky jurnal*, 1932, No. 7-8, 42-76.—The author begins with the methodological appraisement of two of the most important tendencies in the neurology of today, the representatives of which are Pavlov and Lashley. He finds that while the structural-analytic side predominates in the doctrine of the former, totality of function is exaggerated in the interpretation and experimental treatment of the latter. The solving of neurological problems absolutely depends upon the correct combination of

analytic and synthetic methods of research on nervous activity. The author tries to approach this combination, suggesting a new method of research in the dynamics of nervous activity. The idea of combining the "analytic possibilities" of the conditioned reflex method, with the animal placed in conditions of active motor choice at the same time, is the chief principle of the above method. Such combination has been put into practice by modifying the usual support of the experimental dog. This gives the animal the possibility of choosing either side, depending on the conditioned stimulus. A support has two troughs (right and left) and guides to right the animal's movements to either side. The conditioned reaction is taken into account in the same way as in the classic method of Pavlov. The author offers 5 curves as examples of the behavior of the animal in the new support suggested by him. He draws the following conclusions: (1) The duplex secretory-motor method makes it possible to study the whole display of higher nervous activity in the form of active choice simultaneously with the analysis of its components. (2) Using this method, the differentiation of two positive conditioned stimuli, produced on one unconditioned stimulus, can be worked out. (3) The method allows one to change only the sign of the motor component within the whole complex reaction, and thereby makes it possible to use the dissociation of the motor and the secretory reflexes for the analysis of the whole reaction of the animal. (4) It allows, on the basis of unity of reaction, a comparison of physiological and biological characteristics of the parts the motor and secretory components take in the manifestation of this unity. (5) The secretory-motor method aids in characterizing the type of the nervous system more completely, due to the inclusion in the experiment of the most variable biologically universal factor—active choice. (6) The method described is a further development of Pavlov's method of conditioned reflexes.—*P. Anokhin* (Nijny Novgorod).

859. Anokhin, P., & Strej, E. [The study of the dynamics of the higher nervous activity. II. Differentiation of two positive conditioned stimuli, produced on the same unconditioned one.] *Nijegorodsky medizinsky jurnal*, 1932, No. 7-8, 53-77.—The authors used the active secretory method to solve the problem whether the differentiation of two positive conditioned stimuli occurs in conformity with the same laws as the classic differentiation by the method of withholding food. The differentiation was made by the unconditioned reinforcement from different paths. The conditioned salivary secretion was simultaneously taken into account. According to the results obtained the authors conclude that the differentiation of sides occurs without inhibition being present in the cerebral cortex. The authors suggest that even when a single component of the whole reaction seems to be inhibited, there is no reason to suppose the presence of the inhibitory process in the cerebral cortex, for the rest of the positive components of this reaction make us draw the conclusion that the excitatory process is induced in response to the conditioned stimulation. The external effect that is made by the

conditioned stimuli is considered by the authors as being either positive or inhibitory; it is the result of the complex action of all levels in the central nervous system as a single unit. The difficulty is in the presence or absence of the component that is a criterion of reaction (e.g., the saliva secretion) for us at the given moment in that complex. This fact is called by the authors "the transference of the complex." Their experiments result in the following conclusions: (1) Differentiation of two positive conditioned stimuli carried out on the same unconditioned one proceeds on the basis of laws which differ in principle from those in the case of differentiation without reinforcing with food: (a) differentiation of positive stimuli proceeds without the inhibitive process being present in the first stage in the cerebral cortex; (b) it proceeds in the same way for both stimuli based on food excitement, as the same conditioned secretion tells us; (c) the motor differentiation develops later than the generalization of food action and goes through the stage of errors; the process of active choice (discrimination) does not set aside the conditioned secretory action; (d) this differentiation is strengthened with the rise of food excitability and relaxed with its fall. (2) Functional dissociation of secretory and motor components of the whole food reaction is a regular stage in carrying out the active choice and has quite another meaning than the "hypnotic dissociation" described by Pavlov. It follows from its presence in the conditions of normal functioning of the central nervous system that: (a) all conditioned stimuli, independently of whether the final effect of the reaction is positive or inhibitory, excite only the positive process in the cerebral cortex; and that (b) the whole reaction of the animal in natural conditions can vary at the expense of one of its components with the invariability of others. This makes us acknowledge the study of the whole dynamics of cerebral activity by one isolated factor to be quite insufficient. This study must include in it the possibilities of analysis and synthesis of higher nervous activity, given in the very method of research. (3) The stability of differentiation of two positive stimuli depends on a long series of external and internal conditions: (a) on the "age" of conditioned stimuli; (b) on the preliminary intense training of one of the differentiated stimuli; (c) on general food excitability; (d) on correlation between physical forces and specific properties of the conditioned stimulus. The light stimulus rouses the motor reaction extremely rarely, in spite of the fact that the secretory effect is the same as with the sound stimuli. (4) The physiological basis for differentiation of two positive conditioned stimuli and the active choice of the corresponding side is the disclosure by conditioned stimuli of two specific food-motor complexes, the leading components of which are: incidental visual-form associations, proprioceptive signals of some, probably very limited, muscular groups, and spatial orientation in respect of the experimentalist, the complex being distinguished by all these components (Gestalt).—P. Anokhin (Nijny Novgorod).

860. Atzeni Tedesco, P., & Piccaluga, L. Le funzioni circolatoria e respiratoria studiate in rapporto all'habitus. (Circulatory and respiratory functions studied in relation to habitus.) *Endocrinol. e patol. costituz.*, 1931, 6, 27.—These researches on the circulatory functions have shown that there is no great difference between leptosomes and pyknics; among the pyknics one finds a higher pulse rate in rest, and a higher arterial pressure, both in rest and during exercise, and among the leptosomes a greater increase in pulse rate after exercise. For those who are concerned with the vital capacity the relation with morphologic type is evident; higher values are observed in leptosomes and lower in pyknics, intermediary values for normals. The same relations exist between vital capacity and body surface, weight, volume of the thorax, and—very evident in this direction—the relation between the morphology of the thorax and the hypochondriac section of the abdomen and the vital capacity, while the contrary relation is found between the vital capacity and the height of body.—R. Calabresi (Rome).

861. Barkley, K. L. A laboratory class demonstration of the establishment of a conditioned reflex. *J. Exper. Psychol.*, 1932, 15, 97-103.—Simple apparatus and procedure for demonstrating to beginners in psychology the Bekhterev type of protection reflex, which the author regards as identical with the Pavlovian conditioned reflex.—S. Renshaw (Ohio State).

862. Bills, T., & McTeer, W. Transfer of fatigue and identical elements. *J. Exper. Psychol.*, 1932, 15, 23-36.—The hypothesis that fatigue transfer is proportional to the number of identical elements in the two tasks between which the transfer occurs was tested. It is possible to select logically identical elements in the two stimulus-response situations. In alternating between two tasks the level of performance, and the fatigue decrement developing in each task, is proportional to the number of identical elements in the two tasks. The performance employed consisted in copying alphabet sequences, such as *abcabc*, *abdabd*, *afefaf*, etc. The logical common elements are, in the three cases, the identical letters. Work decrement was the basis of comparison.—S. Renshaw (Ohio State).

863. Birkholz, J. Eigenartiger Zwischenfall bei Maxillarisleitungsanästhesie: hemikranischer Anfall als Suprareninwirkung. (Peculiar epileptiform attack occurring during infiltration anesthesia of the maxillary nerve: hemicranial attack as an auxiliary effect of suprarenin.) *Monatssch. f. Ohrenhk.*, 1931, 65, 81-83.—The author presents a case of a man 42 years of age who was to be treated surgically for empyema of the maxillary sinus. An injection of 5 cc. of a 2% novocain-potassium sulphate solution, to which a few drops of a 1% suprarenin solution were added, was followed by bradycardia and subjective symptoms of oppression in the cardiac region. About 5 minutes later, following the disappearance of the primary adrenalin reaction, the patient began to complain of a severe headache in the right half of the head; the anesthesia of the

maxillary region was complete and the pulse was normal; the right pupil was of normal width, while the left was extremely constricted. The symptoms disappeared after a few minutes and the operation was successfully carried out. The author is inclined to believe that the above described symptoms were conditioned by the suprarenin; he concludes, on the basis of his observation, that there exists a definite relation between migraine and general hypertension.—*A. S. Schwartzman* (Washington, D. C.).

864. Bousfield, W. A. The influence of fatigue on tremor. *J. Exper. Psychol.*, 1932, 15, 104-107.—The rule of inverse relation between tremor experiments and amplitude is contradicted by the results of the authors. This relation varies with different experimental situations. The rate, amplitude, and irregularity of tremor oscillations vary directly with fatigue.—*S. Renshaw* (Ohio State).

865. Cohen, L. H. Periodicity of recovery during the refractory phase of the eyelid reflex. *J. Exper. Psychol.*, 1932, 15, 436-446.—The investigation sought to answer the question: Is there, during the refractory phase, a uniform return of excitability from the end of the absolute refractory phase to the beginning of the supernormal phase? The recovery for the eyelid reflex was found not to develop in simple arithmetical progression, but in well-defined waves. There is a generally consistent rhythmicity of excitability within the refractory and supernormal phases, as shown by the similarity of these waves for three subjects. The genesis of rhythmic response may depend on the fundamental rhythmicity of recovery from the refractory phase.—*S. Renshaw* (Ohio State).

866. Cohen, L. H. Negative adaptation and refractory phase in the eyelid reflex. *J. Exper. Psychol.*, 1932, 15, 447-454.—The results indicate that speed of negative adaptation of reflex response is a function of the degree of excitability of the reflex at given moments in the refractory phase. A mathematical relationship between speed of extinction of reflex response and specific excitability of the reflex reaction system is indicated.—*S. Renshaw* (Ohio State).

867. Cohen, L. H. The effect of refractory phase upon negative adaptation of primary reflex responses. *J. Exper. Psychol.*, 1932, 15, 455-457.—The relationship of negative adaptation and refractory phase of reflex response was investigated. The influence of refractory phase was shown to determine speed of negative adaptation of response occurring during its incidence. Refractory phase also affected speed of response which occurred before its onset. Several tentative explanations for the latter fact were offered.—*S. Renshaw* (Ohio State).

868. Davis, R. G. Electrical skin resistance before, during and after a period of noise stimulation. *J. Exper. Psychol.*, 1932, 15, 108-117.—The problem was to determine the course of electrical skin resistance before, during and after five minutes of noise stimulation. Readings were taken every half minute. Loud noise causes sudden drops in skin re-

sistance, after which resistance recovers gradually during noise stimulation. After five minutes of homogeneous noise stimulation resistance does not recover thoroughly until after a period of four and one-half minutes. This degree of recovery is greater in women than in men. Large individual differences in the response of the 67 subjects to the procedure were present.—*S. Renshaw* (Ohio State).

869. Dunlap, K. Habits: their making and unmaking. New York: Liveright, 1932. Pp. x + 326. \$3.00.—The author brings his clinical experience to bear particularly upon the problems of stammering, ties, and sexual perversions, and shows how one should apply the theory that habits can be broken by their modified repetition. The background for this theory is an extensive discussion of problems of learning in general. Selected and annotated bibliography.—*W. S. Hunter* (Clark).

870. Freeman, G. L., & Lindley, S. B. Neuromuscular indices of fatigue. *J. Exper. Psychol.*, 1932, 15, 567-605.—Changes in restlessness and tonus which accompany protracted activity were measured. The work assigned was finger remittance (resistance to pressure), finger oscillation, and addition of four-place numbers. The initial level of both restlessness and tonus, and also variability in performance, is directly related to the length of the work period. Protracted activity results in (1) loss of control of behavior set, (2) reinforcement.—*S. Renshaw* (Ohio State).

871. Gibson, J. J., Jack, E. G., & Raffel, G. Bilateral transfer of the conditioned response in the human subject. *J. Exper. Psychol.*, 1932, 15, 416-421.—Data were taken on 13 subjects for transfer of the conditioned response (removal of the hand from an uncharged electrode at the sound of a buzzer). In the training series the right hand only was conditioned. The results consist of responses made with the untrained left hand which had not been specifically conditioned. 62% of the trained subjects made definite withdrawal responses with the finger of the left hand when the buzzer was sounded alone. The inadequacy of the simple physiological schema frequently used in explaining conditioning is pointed out.—*S. Renshaw* (Ohio State).

872. Hengstenberg, H. Gibt es qualitative und quantitative Unterschiede des Willens? (Are there qualitative and quantitative differences in will?) *Pharos*, 1932, 23, 127-143.—A discussion concerning the problem of strength of will with a review of the doctrines of Lindworsky on the subject.—*A. Römer* (Gautzsch bei Leipzig).

873. Hoke, R. L. Factors conditioning efficiency in a motor skill. *J. Exper. Psychol.*, 1932, 15, 316-330.—Mental factors of fear of punishment, and recognition of the exact result of the attempt, are significant factors in the execution of a skilful act. When punishment is given for all but successful or nearly successful attempts, rather than for the gross errors only, efficiency is higher. Attention to the idea of success, punishment for only gross errors, attention to the goal, and attention directed upon accom-

panying sensations are factors of doubtful value. Attention to painful consequences of errors; to the net results of the act; and to the idea of success yield best results. Attention directed to irrelevant mental problems and "free" attention give poor results. Variation was least for attention directed to punishment, to all unsuccessful attempts, and to accompanying sensations; and greatest in the case of direct instruction to perform the act.—*S. Renshaw* (Ohio State).

874. **Kellogg, W. N.** The effect of emotional excitement upon muscular steadiness. *J. Exper. Psychol.*, 1932, 15, 142-166.—The problem consisted in measuring the steadiness of 42 subjects who were under the influence of four different types of emotional situations. Data on relative steadiness were obtained by means of a modified plate-and-stylus tester of the Whipple type. Those subjects whose introspections show that they were severely affected by the emotional situations were less steady than the control group. A faster breathing rate was found not to be the cause of the steadiness changes. The author concludes that increase in involuntary muscular movement is probably related to the degree of excitement induced by emotional stimuli.—*S. Renshaw* (Ohio State).

875. **King, C. E., Garrey, W. E., & Bryan, W. R.** The effect of carbon dioxide, hyperventilation, and anoxemia on the knee jerk. *Amer. J. Physiol.*, 1932, 102, 305-318.—In the dog with the spinal cord intact, the initial depression of the knee jerk which results from an increase of the carbon dioxide tension of the blood is not due to a direct depression of the spinal reflex centers, but to an inhibitory effect from higher centers, due in part to their direct excitation by the carbon dioxide and in part to reflex excitation. The effect of hyperventilation on the knee jerk is that of a mild augmentation, but in animals with the cord intact, inhibitory influences from higher centers may dominate and lead to an actual diminution. In the early stages of anoxia there is evidence of a short period of increased excitability of the lower spinal centers. The effects of a severe and prolonged anoxia are always depressant. The effects of acidosis, alkalosis, and anoxia, within physiological limits, play but a small rôle in accounting for the variability in spinal reflex responses, and are largely overshadowed by other inhibitory and augmentatory factors.—*C. Landis* (N. Y. Psychiatric Institute).

876. **Misbach, L. E.** Effect of pitch of tone-stimuli upon body resistance and cardio-vascular phenomena. *J. Exper. Psychol.*, 1932, 15, 167-183.—Unpleasant loud tone-stimuli usually elicit lowering of body resistance to electric current. The magnitudes of such resistance changes are directly related to the pitch frequency of the sound stimuli when the loudness variable is held constant. The loudness values are describable in terms of units above absolute thresholds for particular frequencies. The judgment of equal loudness of tones was found to be a measure of their disturbing power as indicated by the galvanic response.—*S. Renshaw* (Ohio State).

877. **Munn, N. L.** Bilateral transfer of learning. *J. Exper. Psychol.*, 1932, 15, 343-353.—50 subjects were given 50 trials with the left hand followed by 500 trials with the right hand on a task involving eye-hand coordination. Subsequently 50 trials with the left hand showed an average improvement of 61%. A control group of 50 subjects possessing initial ability comparable to that of the experimental group showed an average amount of transfer due to practice with the right hand of 32.6%. Subjects tended to formulate the problem during training. This formulation carried over to performance with the left hand. In the author's opinion incipient movements of the left hand, while the right hand was being used, may have enhanced the transfer effect.—*S. Renshaw* (Ohio State).

878. **Ohm, J.** Drehnystagmus bei Taubstummen. (Rotatory nystagmus in deaf mutes.) *Monatssch. f. Ohrenh.*, 1931, 65, 805-811.—By means of the author's method of nystagmography traces of labyrinthine function can be demonstrated in deaf mutes. Highly convex glasses of opaque glass do not always exclude the optic component of the rotatory nystagmus. In order to exclude the latter, the room must be darkened, or the head must be covered by a black cloth.—*A. S. Schwartzman* (Washington, D. C.).

879. **Schmidt, H.** Vergleichende Untersuchungen über geistige und körperliche Leistungen bei Schülern. (Comparative studies on the mental and physical attainments of school boys.) *Arbeitsphysiol.*, 1932, 5, 181-202.—The author worked out the correlations between physical strength and mental ability in the cases of 25 boys in the fifth grade of the Hamburg public schools. Physical capacity was determined by measurement of the strength of the back muscles, a 50-meter dash, and ball-throwing. The psychological tests used were addition and cancellation. The results prove that correlations exist between physical and mental accomplishment. They also show that in researches on the relationship between physical and mental abilities, too little emphasis is put on the mental side; and further, that in the physical sphere, allowance must be made for the constitutional factor in order to rule out the influence of height and weight on the degree of attainment.—*F. Sack* (Vienna).

880. **Schröder, H.** Einwirkung einer erholenden und einer anstrengenden Turnstunde auf neun- bis zehnjährige Schülerinnen. (Effect of a period of light and of strenuous exercise on 9- to 10-year-old school girls.) *Arbeitsphysiol.*, 1932, 5, 169-180.—These studies, which were made on 30 girls in a Hamburg elementary school, concern the effects of 35-minute periods of light and of strenuous exercise on concentration, muscular strength, and pulse rate. The results showed that light gymnastics and play reduced the mental accomplishment of one-sixth of the children, while athletic games and running affected almost one-half of the pupils. Most of the children thus affected were of weaker constitution. Dynamometer tests showed that both mild and strenuous exertion had a stimulating effect on one-fourth of the pupils. Heavy exercise caused marked fatigue

in one-fourth, and light exercise had no effect in half of the cases. Mild exercise caused no essential change in the pulse rate, while athletics produced a rise, lasting, however, only 15 minutes, in 93% of the children. No difference in constitution was demonstrable between those who did and those who did not show this rise.—*F. Sack* (Vienna).

881. Shipley, W. C. Conditioning the human plantar reflex. *J. Exper. Psychol.*, 1932, 15, 422-426.—Of the ten subjects used three showed no conditioning, three conditioned ankle and toe reactions, and seven conditioned toe movements. Three of the seven showed conditioned reaction of a downward deflection where the reactions of the training series were characterized by an upward deflection. For the subjects showing the conditioned toe reaction the mean amplitude of the first conditioned reaction was 40% as great as the mean amplitude of the responses of the training series.—*S. Renshaw* (Ohio State).

882. Siusin, I. K. [Concerning the relation of the skin galvanic and psychogalvanic reaction with the K and Ca content of the blood.] *Zh. nevropatol. i psichiat.*, 1931, 24, 94-101.—Eleven blind patients between the ages of 14 and 20 were examined. The blood was taken before experimenting, in order to determine the level of potassium and calcium. A few minutes after taking the blood the skin galvanic reaction was investigated. These experiments were conducted in a special room during the morning hours. In order to polarize the skin of the patient he was placed in the circuit with the galvanometer for ten minutes before the experiment began. Physical, chemical, symbolical, external, and internal stimuli were used, which caused different actions and deviations in the organism, which were shown by the movements of the mirror of the galvanometer. The author states that the experiment shows the following: (1) The total skin galvanic reactivity is in close connection with the absolute and relative quantity of blood K. (2) The greater the absolute quantity of K the greater the general skin reactivity (correlation .55). (3) The increasing of the quantity of K increases the galvanic reaction (correlation .46). (4) With the absolute enlargement of the quantity of K the galvanic reflex is increased to the individual stimuli. (5) The quantity of calcium, both as an absolute and relative figure, has no correlation with either the general galvanic reaction or with the individual reflexes, and apparently the deviation of the quantity of calcium, *per se*, is not dependent upon K and does not have any fundamental part in the formation of the galvanic response. (6) The mechanism of the formation of the skin galvanic reflex apparently should be approached from the standpoint of the biochemical deviations or changes which take place, especially of the absolute and relative quantity of calcium in the blood. (7) The galvanic reflex, which is a sensitive indicator of the reaction of the nervous system, deserves a broad application in the investigation of the functional condition of the nervous system in general, and of the vegetative system in particular. (The editor of the journal calls attention to the conflict between conclusions 5 and 6, stating that he does not

think that the author has proved what he tried to show.)—*C. Landis* (New York Psychiatric Institute).

883. Stern, G., & Schilf, E. Ueber Linksfüssigkeit. (Left-footedness.) *Zsch. f. d. ges. Neur. u. Psychiat.*, 1932, 139, 41-43.—"Left-footedness in children may best be ascertained by means of ball-kicking. In general, left-handed children are also left-footed. Left-footedness is rare in cases of right-handedness."—*C. W. Fox* (Rochester).

884. Stroud, J. B. The rôle of muscular tensions in stylus maze learning. *J. Exper. Psychol.*, 1932, 15, 606-631.—A pressure stylus, with a piston device for recording downward pressure and a pneumatic attachment for recording squeeze on horizontal pressure, was employed. Tension and difficulty of the task are directly related. Tension decreases with successive trials on difficult mazes, but increases on easy mazes. Tension and the speed of learning are positively related.—*S. Renshaw* (Ohio State).

885. Tanturri, V. Augenmuskellähmung, Störungen der konjugierten Bewegungen der Augen und optischer Nystagmus. (Paralysis of the ocular muscles, disturbances of the conjugated movements of the eyes, and optic nystagmus.) *Monatssch. f. Ohrenh.*, 1931, 65, 295-303.—Optic nystagmus includes two movements, a slow movement, which may also depend on muscular equilibrium, and a rapid movement, which also leads to fixation. The muscular state of tension of the associated eye movements may affect the nystagmus, so that when disturbances in the equilibrium are absent the nystagmus disappears. The rapid phase of the nystagmus has the form and direction of the functioning ocular muscles. Disturbances in equilibrium may lead to a nystagmogenic condition of the eye muscles, and a labyrinthine stimulation gives rise to an ocular reaction phenomenon which is more intensive than normal. The stimulation of the horizontal ampulla produces a definite effect not only on the lateral ocular muscles but on all muscles participating in the movement. The labyrinthine nystagmus is independent of the optic; it may delay the latter when it differs from it in form and direction. The conditions producing the optic and the labyrinthine nystagmus are essentially different.

—*A. S. Schwartzman* (Washington, D. C.).

886. Telford, C. W., & Anderson, B. O. The normal wink reflex; its facilitation and inhibition. *J. Exper. Psychol.*, 1932, 15, 235-260.—The eye wink was studied in human subjects as a simple reflex, when voluntarily inhibited, and when voluntarily reinforced. In the beginning a refractory period as indicated by diminishing response was found under all conditions. Under the first and last conditions a super-normal interval, during which an abnormally large response is elicited, was found. Continued practice increases the length of the refractory period of the passive reflex and shortens the refractory period in the voluntarily inhibited and reinforced responses. These phenomena are described as oscillatory effects due to fluctuation of excitability. Individual differences in length of these rhythms are present. Similar phenomena in other processes are indicated.—*S. Renshaw* (Ohio State).

887. Wasowski, T. *Einfluss des Adrenalin und des Ephetonin auf die Labyrinthreflexe.* (The influence of adrenalin and ephetonin on the labyrinthine reflexes.) *Monatssch. f. Ohrenh.*, 1931, 65, 967-977.—A comparison of the influence of ephetonin and of adrenalin on the labyrinthine reflexes reveals a certain similarity. In both cases there disappear at first the reactions to progressive movements; the adrenalin leads to weakening or inhibition of the positional reflex. The ephetonin acts similarly, but its intensity is weaker. The compensatory movement of the eye bulb remains unchanged in both cases of intoxication; instead there appears a spontaneous nystagmus. The adrenalin produces a stronger effect on the caloric labyrinthine reflex. It weakens the degree of nystagmus, and large doses of adrenalin may completely inhibit the caloric reflex. The ephetonin is capable of decreasing the caloric irritability of the labyrinth only in a few cases, but in most of the cases the character of the caloric reflex remains unchanged.—A. S. Schwartzman (Washington, D. C.).

888. Whitehouse, A. G. R., Hancock, W., & Hal-dane, J. S. The osmotic passage of water and gases through the human skin. *Proc. Roy. Soc. Lond. B*, 1932, 111, 412-429.—Most of the moisture given off from the skin during rest, under ordinary conditions of temperature, passes through by osmosis or diffusion. The osmotic loss increases rapidly as the skin temperature rises, but at length the presence of liquid sweat over the whole skin interrupts the process completely. Osmotic loss is controlled physiologically in conjunction with the control of skin circulation, and when the skin is warm but not yet wet with sweat it plays a large part in the regulation of body temperature with varying external temperatures and rates of heat production within the body. The passage of gas through the skin runs more or less parallel with the osmotic passage of moisture.—F. C. Bartlett (Cambridge, England).

[See also abstracts 799, 824, 828, 831, 840, 854, 918, 921, 928, 969, 1040.]

PLANT AND ANIMAL BEHAVIOR

889. Braun-Blanquet, J. *Plant sociology.* (Trans. by G. D. Fuller & H. S. Conrad.) New York: McGraw-Hill, 1932. Pp. xviii + 430. \$4.50.—The translators have added recent material, with the approval of the author. The work is on what is usually called ecology, and explicitly excludes any interaction of plants upon each other except indirectly through competition and parasitism. The six parts are entitled: the basis of social life among plants; the organization of plant communities; synecology or community economics; syn genetics (i.e., the development of plant communities); synchorology (i.e., the distribution of plant communities); and systematics of phytosociology.—R. R. Willoughby (Clark).

890. Dale, H., Marble, A., & Marks, H. P. The effects on dogs of large doses of calciferol (vitamin D). *Proc. Roy. Soc. Lond. B*, 1932, 111, 522-537.—The toxic action of the pure, crystalline vitamin D

is studied. There is no ground for the suggestion that vitamin D in excessive doses acts by promoting secretion of the parathyroid hormone, or by rendering the organism more responsive to its action.—F. C. Bartlett (Cambridge, England).

891. Evans, H. M. Further observations on the medulla oblongata of cyprinoids; and a comparative study of the medulla of clupeoids and cyprinoids with special reference to the acoustic tubercles. *Proc. Roy. Soc. Lond. B*, 1932, 111, 247-280.—F. C. Bartlett (Cambridge, England).

892. Gillett, J. D., & Wigglesworth, V. B. The climbing organ of an insect, *Rhodnius prolixus* (Hemiptera, Reduviidae). *Proc. Roy. Soc. Lond. B*, 1932, 111, 364-375.—The climbing organ of *Rhodnius prolixus* is studied both histologically and experimentally. The organ is a little oval sac of pliant chitin filled with blood. If a model is constructed consisting of a disc separated from a glass plate by a wedge of oil, it can be moved readily towards the open edge of the wedge, but is very resistant to movement towards the point of the wedge. This appears to be due to adhesion or seizure caused by the breaking down of the oil film at the point of the wedge. It is suggested that the climbing organ of *Rhodnius* operates in a manner similar to that of the model.—F. C. Bartlett (Cambridge, England).

893. Heron, W. T., Ingle, W. J., & Hales, W. M. Work output of rats subjected to continuous faradic stimulation. *Scienos*, 1932, 76, 550.—By the use of certain methods in which the gastrocnemius muscle of the rat is subjected to faradic stimulation, it has been possible to maintain a high level of work output for upwards of ten days, during which time the muscle lifts a 100-gram weight at the rate of three times per second. The total amount of work, as calculated for each rat, was found to range between 105,000,000 and 177,000,000 ergs. This is only a rough approximation, since such factors as friction and inertia were not allowed for in making the calculation. Both the time and work records are considerably greater than any previously reported. The authors believe that the greater amount of work is due primarily to differences in the method employed. A detailed description of the methods and apparatus used and the results obtained in the present study is to be reported in a later paper.—H. W. Karn (Clark).

894. Krechevsky, I. "Hypotheses" in rats. *Psychol. Rev.*, 1932, 39, 516-532.—The usual curve for learning a sensory discrimination habit shows an initial period of practically no progress, then a period of positive acceleration to complete mastery. The contrast between this and the typical negatively accelerated curve has never been explained. The author explains it on the ground that the early stages do not represent chance trials, but show attempted solutions on the part of the animal in response to inadequate hypotheses. As the successive hypotheses prove unsatisfactory they are abandoned for more satisfying ones, until the completely adequate one leads to successful solution. The logic of the argument is that responses in a given direction occur much more consistently for a time than the predicted

chance value would suggest, and that abrupt changes in the direction of these responses show the abandonment of one hypothesis and the testing of another. The author concludes "the learning process at every point consists of a series of integrated purposive behavior patterns."—A. G. Bills (Chicago).

895. Kuo, Z. Y. Ontogeny of embryonic behavior in Aves: V. The reflex concept in the light of embryonic behavior in birds. *Psychol. Rev.*, 1932, 39, 490-515.—The doctrine that habits are post-natally acquired behavior patterns integrated from simple reflexes has been justly criticized on the ground that the early behavior of most, if not all, vertebrate animals is characterized by massive movements, rather than by separate reflexes. Hence reflexes come about by a process of differentiation from the total pattern. Coghill has attempted to account for this differentiation on neurological and anatomical grounds. Kuo objects to this theory and believes that it is better explained on physiological grounds, and gives experimental evidence for this view from studies of avian embryos. He reports that local reflexes result from two factors; the environmental interferences, and the low intensities of stimulation. For example, interference of the yolk sac with movements of the limbs on one side results in independent movement of the other side. And although strong intensities of stimulation produce movements of the whole body, weak intensities arouse only local reactions. The problem of temporal integration of complex acts, like talking in human infants, requires a resynthesizing of original mass movements into word or sentence responses. Hence, for students of behavior, the problem of the original embryonic condition of mass movements is a far less important question than that of how these mass movements are individuated and reintegrated into a temporal organization. Kuo denies that Coghill's findings lend any support to Gestalt theory, which he styles "a hybrid between old-fashioned mentalistic psychology and Bergsonian philosophy under the guise of science."—A. G. Bills (Chicago).

896. Maclagan, D. S. The effect of population density upon rate of reproduction with special reference to insects. *Proc. Roy. Soc. Lond. B*, 1932, 111, 437-454.—An experimental and statistical study. The relation between density and rate of reproduction, in the populations studied, is said to conform to the formula: $\log Y = \log a + b \log X$, where Y represents progeny and X the space per individual, and a and b are constants.—F. C. Bartlett (Cambridge, England).

897. Snow, R. Experiments on growth and inhibition. Part III: Inhibition and growth promotion. *Proc. Roy. Soc. Lond. B*, 1932, 111, 86-105.—How is it that, in dicotyledons, the growing leaves of a shoot tend to inhibit lateral buds or shoots, but promote the growth of their own shoot below them? Experiments indicate that the reason is that the stems of growing shoots are protected from the inhibiting influence by the cambial stimulus and other growth-promoting influences coming from their own growing leaves.—F. C. Bartlett (Cambridge, England).

898. Stiles, W., & Leach, W. Researches on plant respiration. I: The course of respiration of *Lathyrus odoratus* during germination of the seed and the early development of the seedling. *Proc. Roy. Soc. Lond. B*, 1932, 111, 338-355.—F. C. Bartlett (Cambridge, England).

899. Székely, L. Prinzipielle zu der Frage, ob die Tiere menschliche Wörter "verstehen" können. (Fundamental considerations in connection with the question as to the ability of animals to "understand" human words.) *Zsch. f. Psychol.*, 1932, 126, 376-384.—The conclusion of Sarris that dogs can be trained to understand human words is criticized severely both on psychological and on linguistic grounds. It is held that the training of an animal to respond to words does not necessarily imply that the words are really "understood."—R. B. MacLeod (Cornell).

900. Wheeler, W. M. How the primitive ants of Australia start their colonies. *Science*, 1932, 76, 532-533.—Three different methods of colony-founding in ants have been described by various workers from time to time. The author reports that he has been able to detect a fourth, quite unexpected method in several Australian species of the primitive subfamily Ponerinae. This method, which is designated as an "imperfectly, or intermittently claustral method," is briefly described in the report. It is of considerable significance for the following reasons: (1) being essentially like the method employed by the social wasps (e.g., by our hornets and yellow-jackets of the genus *Vespa*), it confirms the notion that the ants are merely a group of social Vespoidea; (2) "the fact that the intermittent is the prevailing and perhaps the only method of colony-founding among the Ponerinae, which are unanimously regarded as the ancestors of the other seven taxonomic subdivisions of ants, supports the theory that the haplotropic, or single-mother-family, rather than the pleometropic, or multiple-mother-family, is the phylogenetic basis of all the diverse societies encountered among the hymenopterous insects."—H. W. Karn (Clark).

[See also abstracts 784, 848, 849.]

EVOLUTION AND HEREDITY

901. [Anon.] Joint eugenics societies meeting (abstracts of papers). *Eug. News*, 1932, 17, 76-88.—This article reports in abstract form the following papers: *Eugenics in Vermont*, by H. F. Perkins, reviews the organization and work of the Eugenics Survey of Vermont and reports the following researches: (1) a study of 50 families, numerous known to social agencies and institutions; (2) a study of "key" families in some Vermont towns; (3) a psychological study of women in Rutland Reformatory and of some defectives at large in the community; (4) a three-year comprehensive survey of environmental factors which help to mold the characters of Vermonters; (5) a study of migration. *Capacity and Heredity*, by Ellsworth Huntington: "At the lower end of the social scale the survival rate drops suddenly to a level far below that of the ordi-

nary miner or laborer." From a study of Yale and Harvard men the author concludes that "at the highest level of social value the curve of survival turns sharply upward, just as it turns sharply downward at the other end of the scale." *Agriculture, Education and Eugenics*, by Robert C. Cook: "One of the things we need most acutely today is emotionally satisfying causes. There are few greater opportunities to supply these than is afforded by a dramatization of the inter-relations between agriculture and the perpetuation of our race." *Heredity of Otosclerosis*, by C. B. Davenport: "The abnormal osteogenic processes to which otosclerosis is due probably depends upon a defective gene in the X-chromosome and one in an autosome. The autosomal gene is apparently one which controls directly or indirectly osteogenic processes. The sex-linked gene probably affects in some way the calcium metabolism and adult bone metamorphosis, which is especially disturbed in the female during pregnancy. . . . The intermarriage of otosclerotics gives an extraordinarily high percentage of affected children. . . . Otosclerosis in the mother only is apt to give rise to more affected sons than where the father only is affected." *The Relation of Age at Mating to Fecundity*, by W. L. Wachter, reports an experiment: Female siblings from stock strains of mice were divided into two groups and mated with their brothers. Every female in the control group had a litter sister in the experimental group. Females in the control group were mated from the time they were weaned, those in the experimental groups were isolated until 6 months of age. The same sires were used in both groups. The young born after the mothers were 6 months and 3 weeks of age showed no difference in size of litter between groups, but a decrease in productivity of the experimental group was noted in a high percentage of complete sterility. *Meetings that Lead to Marriage*, by Paul Popenoe, reports an analysis of data covering 1507 marriages of college people in the entire U. S.: "Commercial recreation, which furnishes the chief meeting place for the wage-earning group, is of negligible importance in the college-bred group: the latter find more of their husbands and wives in school (mainly high school or college) than in any other way." *Inheritance of Double-Jointedness in the Thumb*, by Leon F. Whitney: The author's "data show that double-jointedness in the second joint of the thumb follows the inheritance pattern of a typical Mendelian recessive." *Family Stock Betterment with Respect to Left-Handedness*, by Alfred Gordon, deals with the inheritance of left-handedness. The author remarks that "the transmission of left-handedness from the father is more frequent to the son than to the daughter," but from the mother to either a son or a daughter it occurs with about equal incidence. The causes he assigns to changes in the hemispheres of the brain during intra-uterine fetal development. *Race Turn-Over in Hawaii*, by Harry H. Laughlin, deals with the changes in dominant racial stock in Hawaii due to the settlement of Japanese, Chinese, and finally of Filipinos in the islands.—*M. V. Louden* (Pittsburgh).

902. Conrad, H. S., & Jones, H. E. A field study of the differential birth rate. *J. Amer. Statist. Assn.*, 1932, 27, 153-159.—From a fairly adequate sample of 19 towns in rural New England, it appears that the more intelligent parents, as measured by the Army Alpha, begin to give birth to children slightly later than the less intelligent. The period of child bearing, average natal interval, and number of living offspring seem to bear no significant relation with intelligence, education, or social status. 129 families were investigated.—*E. B. Greene* (Michigan).

903. Frank, M. H. Eugenics and sex relations for men and women. New York: Preferred Pub's, 1932. Pp. 544. \$2.98.—*R. R. Willoughby* (Clark).

904. Frets, G. P. Die Familie AA. Eine Familie mit mehreren Geisteskranken. (The AA family. A family with many mentally diseased members.) *Zsch. f. d. ges. Neur. u. Psychiat.*, 1932, 139, 694-757.—The family AA has among its members many patients with psychoses. Five generations of the family are more or less adequately known. In some of the cases a combined psychosis may be traced to contributions from the two parents. The manic-depressive psychosis tends to be dominant, dementia praecox to be recessive.—*C. W. Fox* (Rochester).

905. Lottig, H. Hamburger Zwillingstudien. (Hamburg studies of twins.) *Beih. z. Zsch. f. angew. Psychol.*, 1931, No. 61. Pp. 122.—(Soc. Sci. Abst. IV: 13983).

906. Notestein, F. W., & Sallume, X. The fertility of specific occupational groups in an urban population. *Milbank Memorial Fund, Quar. Bull.*, 1932, 10, 120-130.—(Soc. Sci. Abst. IV: 14021).

907. Orgler, A. Über Zwillingssbeobachtungen. (Concerning observations on twins.) *Int. Zsch. f. Indiv.-psychol.*, 1932, 10, 353-357.—Consideration of terms and methods used in the observation of twins. Case studies of identical twins especially are considered. The conclusion is that in the development of personality environment plays a more important rôle than does the inherited predisposition.—*O. N. de Weerd* (Beloit).

908. Penrose, L. S. On the interaction of heredity and environment in the study of human genetics (with special reference to Mongolian imbecility). *J. Genetics*, 1932, 25, 407-422.—(Soc. Sci. Abst. IV: 14037).

909. Takata, Y. The differential birth rate. *Koizai-Ronso*, 1931, 32, 68-84.—(Soc. Sci. Abst. IV: 14038).

910. Whitney, L. F. Religion and the birth rate. *Birth Control Rev.*, 1932, 16, 101-105.—(Soc. Sci. Abst. IV: 14039).

[See also abstracts 826, 987, 1064.]

SPECIAL MENTAL CONDITIONS

911. Braatöy, T. Die psychoanalytische Methode. Beitrag zu der methodologischen Problematik in der Psychologie. (The psychoanalytic method. Contribution to the problem of methodology in psychology.) *Zsch. f. d. ges. Neur. u. Psychiat.*, 1932, 139, 283-317.

—The writer discusses the question whether notes should be taken by the psychoanalyst during or after consultation with the patient. In general, the note-taking should be reserved until afterward. Words are not the only important factors to be noted. An objective "fact," uninterpreted, has no scientific value. The writer discusses Köhler's and Thorndike's views of intelligence. The desire of the scientist for measurable "quantities" is particularly dangerous in psychology because in that science we are dealing with phenomena of many dimensions. Symbols must be chosen in relation to the problem. Exactitude is a relative concept to be considered in the light of the problem. Psychoanalysis is the method which best realizes the multidimensionality of human conduct. In the analytic situation, the memory of the analyst is sufficiently exact, because it depends not upon mere laws of association but upon understanding of the patient's own problem.—C. W. Fox (Rochester).

912. Brachfeld, O. *Critica de las teorías sexuales del Dr. Marañón.* (Criticism of the sex theories of Dr. Marañón.) *Rev. med. de Barcelona*, 1931, 16, 548-561.—(Soc. Sci. Abst. IV: 13996).

913. Bückmann, I. *Antoni Gaudi. Ein pathographischer Versuch, zugleich ein Beitrag zur Genese des Genieruhms.* (Antoni Gaudi. A pathographic study and a contribution to the genesis of the fame of genius.) *Zsch. f. d. ges. Neur. u. Psychiat.*, 1932, 139, 133-157.—A pathographic study of the Spanish architect, Antoni Gaudi. Bückmann discusses Gaudi's genius in terms of the categories used by Otto and Lange-Eichbaum—majesty, energy, fascination, unearthliness, wonder, sanctity.—C. W. Fox (Rochester).

914. Chopra, R. N., & Bose, J. P. Psychological aspects of opium addiction. *Indian Med. Gaz.*, 1931, 66, 663-666.—(Soc. Sci. Abst. IV: 14088).

915. Clark, L. P. A contribution to the early development of the ego. *Amer. J. Psychiat.*, 1932, 11, 1161-1180.—A psychoanalytic concept of the "central core of the ego" is presented. "Our speculations have led us to postulate that the id carries scattered ego-remnants and ego-tendencies from previous generations; and that these come into being with the first stirrings of new life following conception. Impelled by the life-instincts in the id, these disjointed ego-materials are viewed as fusing together to form a closer union and to constitute the innermost core of the ego."—S. J. Beck (Boston Psychopathic Hospital).

916. Deutsch, H. *Psycho-analysis of the neuroses.* (Trans. by W. D. Robson-Scott.) London: Hogarth, 1932. Pp. 237. 10/6.—The author's lectures before the Vienna Training Institute are divided into parts on hysteria, phobia, and obsessional neurosis, with an introduction on the part of the current conflict in the formation of neurosis, and an appendix on melancholia. Each of the parts is divided into from two to four chapters, and each chapter is given to remarks on the analytic aspects of a certain type of phenomena falling under the diagnosis in question. The book is illustrated throughout by copious material

from the author's analyses.—R. R. Willoughby (Clark).

917. Dorer, M. *Historische Grundlagen der Psychoanalyse.* (Historical foundations of psychoanalysis.) Leipzig: Meiner, 1932. Pp. 184. M. 1.60.—Dorer compares, among others, Herbart with Freud. He finds a close connection between them. The immediately following historical basis is found in the system of the Viennese professor Theodor Meynert, whose extreme materialistic psychology Freud has taken over. Meynert also bridges the gap between Freud and Herbart. The essential fact is that psychoanalysis has its roots in the historical foundations of a past era.—A. Römer (Gautzsch bei Leipzig).

918. Fisher, V. E. Hypnotic suggestion and the conditioned reflex. *J. Exper. Psychol.*, 1932, 15, 212-217.—Under ten different situations involving post-hypnotic suggestion, hypnotic state, and waking state, the investigator observed the development of a conditional response. The results for one of the five subjects are given. The results indicate the dependence of a conditioned response, even of a fairly pure reflex type, upon conscious perception of the stimulus. Several related problems were suggested by the experimenter.—S. Renshaw (Ohio State).

919. Fishman, J. F., & Perlman, V. T. The real narcotic addict. *Amer. Mercury*, 1932, 25, 100-107.—(Soc. Sci. Abst. IV: 15752).

920. Flemming, E. G. Testing some aspects of personality. *J. Soc. Psychol.*, 1932, 3, 376-384.—The results of fellow-student ratings on pleasing personality, emotional steadiness, emotional expressiveness, and social adjustment are correlated with the Colgate Schedule C2 for introversion, the George Washington University Social Intelligence Test, the Sims Score Card for Socio-Economic Status, the Army Alpha Test, and the Thorndike Examination for High School Graduates. The only correlation over .4 was between social intelligence and the student ratings on social adjustment for men.—E. B. Newman (Harvard).

921. Freeman, G. L. Compensatory reinforcements of muscular tension subsequent to sleep loss. *J. Exper. Psychol.*, 1932, 15, 267-283.—The purpose was to test the effects of sleep loss upon performance. Tonus acts as compensatory mechanism during effort, fatigue, and distraction. Autogenic reinforcements following loss of sleep were found. Four performance tests consisting of finger oscillation, discrimination reaction, manual pursuit, and memory span were given to two subjects. While efficiency of performance may remain at the same level the tonus accompaniments of the work are higher for days following serious loss of sleep. A higher degree of tension tended to accompany night work which equalled the efficiency of morning performance. The cumulative effect of prolonged sleep loss tended to destroy the efficacy of tonic muscular compensation.—S. Renshaw (Ohio State).

922. Grotjahn, M. *Ueber Selbstbeobachtungen beim Erwachen.* (Introspections upon waking.)

Zsch. f. d. ges. Neur. u. Psychiat., 1932, 139, 75-96.—The writer kept a careful diary of introspections made as soon as possible after waking from sleep. He gives examples of waking resulting from outer, inner and somatic conditions. He discusses in some detail gradual waking. He refers also to states similar to waking. The data shed some light upon the genesis of symbolic thinking and the analogy between sleep and schizophrenic experience. The waking experience is characterized by a transition from the consciousness of dreamed symbols and images through a state of helplessness to a state in which the real meaning of the outer world can be grasped. The schizophrenic seeks, even after waking physically, the meanings which he believes lie behind things.—*C. W. Fox* (Rochester).

923. **Harms, E.** *Die ärztliche Neurose.* (The physician's neurosis.) *Zentbl. f. Psychotherap.*, 1932, 5, 634-637.—A neurosis peculiar to physicians is the obsessive intrusion of crass medical representations into emotional experiences which should normally be pleasant. Harms discusses this condition in connection with a review of *Gehenna, a Man and His Conscience*, by the Finnish novelist J. Hemmer. The book portrays the tragic life problem of a physician with this neurosis. Many physicians suffer from this condition without being completely aware of it. Its germs are found in the medical jargon which medical students affect and which many are unable later to throw off. Although studies of vocational neuroses are numerous, almost nothing has been written on this form, precisely because it is the neurosis of the investigators themselves. Like most of the neuroses of the intellectual callings, it has a two-sided background, i.e., it is both a true vocational neurosis and an attitude toward the world. Interpreting the condition according to Harms' theory of functional energy, the associative mechanism reacts to all stimuli with medical representations, which throws out of connection the broader emotional and intellectual functions. The victim is painfully conscious of the crippling of these, but finds, when he tries to reactivate them, that he is incapable of experiencing them and that the medical ideas appear with redoubled affective power. That is the vocational side of the neurosis. Its broader background, however, of which he is not usually fully aware, is the conflict which it produces in his viewpoint of the world—the tension between materialism and the esthetic and religious emotions.—*M. E. Morse* (Hyattsville, Md.).

924. **Hayasaka, C.** *Psychoanalytische Studien über neurotische Angst. II. Mitteilung—Angsthypnotische. (Psychoanalytic studies of neurotic anxiety. II. Anxiety hysteria.) Arbeit. Psychiat. Institut. d. K. Japan. Univ. zu Sendai.*—The writer presents the case of a 25-year-old widower displaying general anxiety symptoms, particularly agoraphobia and a constant tendency to reel to the left. The latter symptom was especially pronounced in the presence of the woman he loved or when there was a possibility of meeting her. This, together with the fact that the left side was the only effective position for coitus, would lead to an interpretation of the symptoms as

a conversion symptom of a partial impulse, so-called "posture pleasure" (in the genital sense). As agoraphobia was centered on places where the patient had been seized with dizziness, it presents the typical phobia for the scene of temptation. The patient was found to be polygamous in tendency and to have committed acts of incest in his early youth. The polygamous impulse may be attributed to the constant quest of the mother image, the neurotic reactions to genital stimulation being rooted in an infantile suppressed Oedipus complex. Although fixation on the mother predominates in this case over the father complex, the author regards it as a type of Oedipus picture occurring with anxiety hysteria. That the street was selected out of other possible situations for reeling attacks, may be explained by an exhibitionist tendency. The author indicates that this case throws no light on the question whether anxiety neurosis constitutes a disease sui generis and urges careful consideration before pronouncing such a case an actual neurosis, even though the specific cause and symptoms appear to be actually neurotic.—*J. L. Jervis* (Yale).

925. **Janisevskij, A. B.** *O biologicke koncepcie spanku.* (On the biological conception of sleep.) *Rev. v neur. a Psychiat.*, 1931, 28, 141-151.—From biological, physiological, and pharmacological data the relation of sleep to the function of the cerebral cortex and mesencephalic and diencephalic nuclei is known. In view of this fact it is necessary to distinguish two types of sleep: sleep caused by the lack of exogenous excitation (inhibition irradiating from the cerebral cortex) and that caused by endogenous necessity (inhibition irradiating from the diencephalon and mesencephalon). The two types of sleep may be described as a process of inhibition in the sense of Pavlov, but sleep is only an elective inhibition when a number of mechanisms (for example, the parasympathetic) are in a state of hyperfunction. The author thinks that it is unnecessary to distinguish different centers for the dream state; it is a matter of a process of excitation or inhibition of the ordinary sleep centers.—*E. H. Kemp* (Clark).

926. **Jung, C. G.** *Die Beziehungen der Psychotherapie zur Seelsorge.* (The relation of psychotherapy to religious therapy.) Zurich: Rascher, 1932. Pp. 30. M. 2.50.—Aid does not follow upon preconceived ideas, but rather through the consideration of those which have already been effective even if they were in error.—*A. Römer* (Gautzsch bei Leipzig).

927. **Landauer, K.** *Das Menstruationserlebnis der Knaben.* (Boys' ideas about menstruation.) *Zsch. f. psychoanal. Päd.*, 1931, 5, 175-184.—The impressions produced on one boy by finding out about his sister's menstruation were, first, that menstruation is something "horrible" which separates man and woman, since through it he lost his sister as a harmless comrade. On the other hand, however, he envied her because she had matured, and menstruation was a sign of the ability to have babies. Menstruation was also interpreted by him as castration; further, there was a feeling of contempt for a menstruating

woman as unclean, because of the connection between menstruation and dirt and feces.—*M. E. Morse* (Hyattsville, Md.).

928. *Larson, J. A., & Haney, G. W. Cardiorespiratory variations in personality studies.* *Amer. J. Psychiat.*, 1932, 11, 1035-1081.—After a review of literature on investigations into personality by physical and physiological techniques the authors describe some of their own work by means of the polygraph technique. They conclude that it helps psychiatrists detect deception and that it is also an aid in obtaining rapport with a resistant child. They find as yet no reaction pattern which is finally diagnostic, but do report some records as seeming more irregular in psychopathic cases. A lengthy bibliography is appended.—*S. J. Beck* (Boston Psychopathic Hospital).

929. *Macht, D. I., & Schroeder, H. Pharmakologische Studie über die Wirkung von Caffein-Adeninmischungen.* (Pharmacological study on the effect of caffeine-adenine mixtures.) *Klin. Woch.*, 1930, 9, 2429-2430.—The first part of this article is devoted to a review of the literature dealing with the effects of coffee and tea in man. In this study the authors report that solutions of caffeine of 1:5000 have toxic effects upon protoplasm. Adenine sulphate solutions of 1:5000 has a stronger toxic effect than solutions of caffeine of the same strength. Combinations of caffeine and adenine in equal proportions have an antagonistic effect. Experiments with rats showed that caffeine has a stimulating effect upon the brain but that combinations of caffeine and adenine do not have as great an effect as does caffeine alone. Pure adenine has no noticeable effect upon the brain. Similar experiments conducted with rabbits gave similar results. The respiration of both rabbits and cats is stimulated by caffeine, but not by adenine, and to a lesser extent by the mixture of the two. A study of the psychological factors involved is being conducted.—*F. J. Gaudet* (Dana).

930. *Martin, E. D. Civilizing ourselves.* New York: Norton, 1932. Pp. 320. \$3.00.—*R. R. Wiloughby* (Clark).

931. *Neugarten, H. Von der Psychoanalyse zur Psychognosie.* (From psychoanalysis to psychognosia.) *Zentbl. f. Psychotherap.*, 1932, 5, 139-158.—Psychoanalysis is inadequate because it recognizes only the biological level as real. The realities of the ideal ego, guilt-feeling, and sublimation are inexplicable psychologically and can be grasped only metaphysically. The solution for the tension between the biological and the ideal ego is not, as psychoanalysis teaches, to educate the ideal ego, but to attain unity with the cosmos, which involves complete abandonment of the ego-super-ego structure of the personality. Organic diseases and neuroses are the result of repressions which all cultures, in the interest of ego-forms, have forced on the cosmic power working through man. Hence the connection between living-for-self and guilt-feeling. Psychognosia is Neugarten's designation for his method of concentrating the life-force (libido), turning it inward, and directing it to super-biological ends. Its therapeutic

possibilities depend on how far the individual can experience, through the life process, a transformation into the infinite.—*M. E. Morse* (Hyattsville, Md.).

932. *Patry, F. L. Outlines of personality study. A résumé for teachers and teachers in training.* Albany: Univ. of the State of New York Press, 1932. Pp. 30.—An outline of the materials and methods entering into a personality study, with a bibliography.—*E. H. Kemp* (Clark).

933. *Pohlisch, K. Alkohol. (Alcohol.) Fortsch. d. Neur. Psychiat. u. Grenzgeb.*, 1932, 4, 431-490.—This article reviews the various publications concerning studies of the effects of alcohol. These studies are grouped under the headings of physiology, metabolism, inner organs, forms of cerebral diseases, pathological anatomy, psychology, statistics, and alcoholism in lands other than Germany. The section on psychology deals with the work of Graf, who investigated the effect of beer, malaga wine, and brandies on skill, and Klatt's theory of alcoholism seen in the light of Adler's individual psychology. A very complete bibliography is attached.—*D. S. Oberlin* (Bryn Mawr).

934. *Sarma, R. N. Psychology of insomnia. Light from Mahabharata.* *The Hindu*, n.d.—A study of Sanskrit texts reveals that according to the Mahabharata, persons suffering from insomnia may be divided into four classes: (1) those "persecuted by unscrupulous superiors" and unable to secure redress; (2) those deprived of wealth and property; (3) "those that are consumed by the burning illegitimate passion for the possession of women who cannot and who would not be his"; (4) professional thieves, burglars, housebreakers, etc. According to this source insomnia may be remedied "if everyone would cultivate the spirit of non-attachment and realize his or her own limitations and proceed to secure adjustment with the environment."—*B. Casper* (Clark).

935. *Schroeder, H., & Macht, D. I. Über die lokalanästhetische Wirkung von 23 isomeren Oktylalkoholen.* (On the local-anesthetic effect of 23 isomeric naphthene-alcohols.) *Arch. f. exper. Pathol. u. Pharmakol.*, 1930, 158, 53-64.—A study of the local-anesthetic properties of 23 naphthene-alcohols and mixtures composed of these. Solutions of different intensities were also studied. Medium-sized specimens of *Rana temporaria* were used, following the technique of Impens, Issekutz, Zorn, Fromherz, and Sollmann. Tables give the time necessary for each of these 23 alcohols and for 27 of the mixtures to take effect and the length of this effect. Considerable difference is found in the various alcohols and their mixtures. Mixtures of the alcohols have a tendency to increase the effect.—*F. J. Gaudet* (Dana).

936. *Schultz, J. H. Oberstufe des autogenen Trainings und Raya-Yoga.* (Superior degree of autogenic training and Raya-Yoga.) *Zsch. f. d. ges. Neur. u. Psychiat.*, 1932, 139, 1-34.—The article deals with the relation of the superior degree of autogenic training to the higher degrees of Yoga. The writer quotes detailed descriptions of the various stages in

the "mystical technology" of Yoga, particularly the types of bodily attitude assumed. Schultz's subjects were trained to fixate above and to the center. This fixation brought with it a deepening of self-mastery. Many functions were facilitated and strengthened. Each observer was instructed to find his *Eigenfarbe*, and later to realize certain colors selected by the experimenter. Later the observers were trained in a free and sure use of these imagined colors. Still later certain objects were to be imagined, and finally abstract objects (e.g., happiness). Autogenic training (a kind of self-hypnosis) may be called a psychophysiological rationalized and systematized Yoga. The writer discusses briefly relations of this training to questions of psychiatry and of the psychology of the neuroses.—C. W. Fox (Rochester).

937. Searns, R. R. An experimental study of hypnotic anesthesia. *J. Exper. Psychol.*, 1932, 15, 1-22.—The purpose was to determine at what psychophysiological levels, and to what quantitative extent, hypnotic anesthesia is able to inhibit or otherwise modify the reactions to pain stimuli. Facial flinch and the increased oscillation in respiratory tracing are nearly eliminated by hypnotic anesthesia. Pulse variability due to pain is reduced by suggested amnesia. Galvanic skin reaction reduces 20% on the anesthetic leg. Modifications of pain reactions do not take place when the subject is instructed to inhibit them.—S. Renshaw (Ohio State).

938. Slade, W. G. Earthquake psychology. *Australasian J. Psychol. & Phil.*, 1932, 10, 58-63.—(Soc. Sci. Abst. IV: 13987).

939. Weissäcker, A. Das Schuldproblem in Psychotherapie und Seelsorge. (The problem of guilt in psychotherapy and religious therapy.) *Kommende Gemeinde*, 1932, 1, 79-92.—Weissäcker communicates a report by C. G. Jung which compares modern theology and philosophy.—A. Römer (Gautzsch bei Leipzig).

940. Willey, M. M. "Identification" and the inculcation of social values. *Ann. Amer. Acad. Pol. & Soc. Sci.*, 1932, 160, 103-109.—The author discusses the significance of social values and analyzes the part played by the mechanism of identification in their inculcation. An attitude is "regarded as a 'set' of the organism to respond in a given manner" while such behavior situations or customs constitute the social values which have expression in the individual's attitudes. "Identification" consists in identifying oneself with another individual, either real or fictitious, so that his attitudes may be experienced. There results "a projection of the individual conception of the self, based on a broadening of the ego consciousness." Attitudes and social values are developed by means of communication. The two institutions of most importance in inculcating social values are the newspaper and the moving picture.—C. C. Neet (Clark).

[See also abstracts 887, 981, 982, 988, 974, 975, 1009, 1011, 1067, 1086, 1089, 1128, 1185.]

NERVOUS AND MENTAL DISORDERS

941. Adler, A. Der Aufbau der Neurose. (The structure of neuroses.) *Int. Zsch. f. Indiv.-psychol.*, 1932, 10, 321-328.—Adler believes a further concept, "the child's creative power," must be added to heredity and capacity if the influence of environment is to be fully understood. The environmental factors do not work causally, but serve as occasions to the child for creative action. Not what the individual possesses counts, but what use he makes of his possibilities. The use is observable, the possessions never. How and why a given child may be influenced cannot be stated statistically but may be understood logically because human behavior is always directed toward some goal. Several influencing factors in the development of a child are early recognizable: (1) Organ inferiority, including weaknesses of brain, endocrine glands, and sense organs. Such minus situations when felt by the child lead to efforts on his part to attain to plus situations. (2) Over-indulgence. Adler emphasizes, "no over-indulgence, no neurosis!" (3) Neglect, the fate of illegitimate, unwanted, and ugly children. All three types face life uncertainly, inadequately prepared to meet the inevitable social problems. The neurotic is explained by the same principles. He lacks social interest or feeling himself, but exploits its presence in others while he refuses to cooperate. A neurotic symptom is always a reaction placing the subject himself beyond the need for cooperating with others while compelling them to serve him and his needs. Such reactions as fears, uncertainty, temper, over-sensitivity, etc., are typical neurotic devices. Functional and all other neuroses grow out of mental conflicts of an individual who has not been properly trained to meet the adjustment situations requiring a greater degree of social feeling (*Gemeinschaftsgefühl*) or socialization than he has developed. Organ inferiorities may account for the initiation of the undesirable attitudes in some cases, but they are not the final basis for the traits. This must be sought in the social attitudes of those responsible for the training of the individual.—O. N. de Weerd (Beloit).

942. Adler, E. Ein Fall von psychogener Anurie. (A case of psychogenic anuria.) *Zentbl. f. Psychotherap.*, 1932, 5, 131-135.—Adler reports an apparently unique case of psychogenic anuria of considerable duration, influenced by hypnotic suggestion. The patient was a 29-year-old man, a stutterer, and somewhat infantile and anxious. The first period of anuria occurred 6 weeks before admission, after a quarrel with his wife, lasted 24 hours, and was accompanied by sweating and restlessness, but no other symptoms. Cystoscopy showed the bladder empty. Examination at the hospital revealed an occasional slight tendency to water retention, but otherwise nothing distinctly abnormal in the clinical or laboratory examinations. The blood chemistry remained normal during anuric periods. During an attack which lasted more than 30 hours, he was hypnotized and given the command to excrete 750 cc. urine at a definite time. He obeyed exactly. The experiment was repeated three times. The centers for general metab-

olism, water regulation, sleep, and the central regulation of other vegetative functions lie in the mid-brain. The reactions between the psyche, hypnosis, and the vegetative system are generally known. Reflex anuria of short duration following dreams, etc., is doubtless mediated through the vegetative system. Apparently, in this case, through the mid-brain and the center for water regulation, and on the organic basis of a slight renal injury from a previous nephritis, an extreme inhibition of water excretion occurred under the influence of emotion.—M. E. Morse (Hyattsville, Md.).

943. Anderson, V. V. The contribution of mental hygiene in industry. *Proc. First Int. Cong. on Ment. Hygiene*, 1932, 1, 696-718.—A summary of a five-year experiment in the handling of personnel problems of a great industry by the combined attack of workers in the fields of psychiatry, psychology and social case work. Concrete instances of the practical application of principles and technique of mental hygiene to the every-day operations of a large business institution are given.—B. Casper (Clark).

944. Beers, C. W. An intimate account of the origin and growth of the mental hygiene movement. *Proc. First Int. Cong. on Ment. Hygiene*, 1932, 1, 501-513.—B. Casper (Clark).

945. Bellsmith, E. B. Obstacles of family attitudes in rehabilitation of state hospital patients. *Psychiat. Quar.*, 1932, 6, 697-703.—The relatives' attitude toward a patient's parole or discharge may be colored by their refusal to accept his recovery, in order to absolve themselves of the responsibility; or they may insist on such parole before it is for the patient's best interests, due to a sense of stigma attaching to his being a public charge, or due to their own emotional needs that the patient remain helpless and dependent. The economic factor may be involved in numerous ways, pressing upon uncertainty as to the future. Helping the family to meet the situation and to realize the patient's needs and rights requires various techniques, and is sometimes almost impossible to accomplish if the family counter-urges are strong. In some cases it is better to place the patient elsewhere during the parole period. But the best results are gained where the hospital representatives can win the confidence of the relatives and assist them to work out their own plans for the patient, with his cooperation, rather than a plan imposed by authority.—E. T. Burr (Columbia).

946. Bigelow, N. J. T. Pre-psychotic personality of catatonic schizophrenics. *Psychiat. Quar.*, 1932, 6, 642-658.—The pre-psychotic personality may shed light on those points distinguishing the catatonic from other forms of dementia praecox. This investigation concerned itself with 35 selected cases, 21 female and 14 male, the ages ranging from 16 to 54, average age 29. 10 of these cases afterwards made adjustment. The questionnaire used was derived in part from Hoch and Amsden, in part from Bowman and Raymond's revision of Wells. The associated malignant traits, by the findings, seem to include: marked anal eroticism, hypochondriasis, inflexibility, stubbornness, seclusiveness, bigotry, irritability, and

"colorlessness," together with palpably infantile reactions. Those patients showing but moderate anal eroticism, marked oral eroticism, narcissism, and definite homosexual strivings, seem to do better. Model children and those with unadjusted Oedipus and Electra situations seem to belong in this category. The author feels that a similar but fuller study carried on with newly admitted cases would produce more accurate results; when such a study has been carried out along the lines advocated by Kretschmer, "only then might all the etiological factors be determined."—E. T. Burr (Columbia).

947. Blalock, J. R. Personality and catatonic dementia praecox. *Psychiat. Quar.*, 1932, 6, 625-641.—The cases for this report on the pre-psychotic personality of 25 males suffering from the catatonic form of dementia praecox were selected with care to discard any possessing a complicating physical factor, any recognizable somatic disease, or feeble-mindedness. In each, the personality study was summarized and the traits evaluated from the total life span. The personality outline used is that of Kirby as revised from Hoch and Amsden. The percentages are not given, as involving too few cases for value statistically; but the figures are presented in eight tables. The study showed (1) intellectual and physical endowments average; (2) the majority in relation to their environment quiet, aloof, stubborn, easily offended, and having a limited range of interests; (3) motor manifestations and output of energy below that considered normal for childhood and early adolescence; (4) almost all reticent, not self-revealing, over-conscientious, and having few or no friends, the majority of these being passive and submissive, and 72% presenting a partially or totally shut-in personality; (5) emotional reaction in all somewhat inadequate; (6) the great majority sexually unadaptable.—E. T. Burr (Columbia).

948. Bouman, K. H. Alcohol as a mental hygiene problem. *Proc. First Int. Cong. on Ment. Hygiene*, 1932, 1, 444-460.—The author points out the social, social-economic and biological effects of alcohol. A historical review of legislative measures regulating the sale of alcohol and a description of organized methods of treating drinkers in Holland closes the paper.—B. Casper (Clark).

949. Brown, P. W. A statistical survey of patients in hospitals for mental disease and institutions for feeble-minded and epileptics in 32 countries. *Proc. First Int. Cong. on Ment. Hygiene*, 1932, 2, 777-797.—A first attempt to secure comparative data on patients in a large number of countries. These data are classified under the following main headings: number of institutions; movement of patients; number of patients per 100,000 of general population; classification of patients. "The most outstanding needs for the carrying on of more significant and more complete studies in the future are (1) the adoption by all countries of a uniform method of tabulating and reporting statistical facts relating to the three classes of institutions, (2) the adoption of uniform classifications of the insane, feeble-minded and epileptics, and (3) the establish-

ment of a central statistical bureau or clearing house for the adequate handling of these data."—*B. Casper* (Clark).

950. Bychowski, G. Untersuchungen über schizophrene Stuporzustände. (Investigations of stuporous states in schizophrenia.) *Zsch. f. d. ges. Neur. u. Psychiat.*, 1932, 140, 30-50.—This is an account of schizophrenic stupor based upon studies of 20 cases. The patient may often experience the surrounding world in a peculiar way; often he creates his own schema of reality. Muscular tonus is usually increased but may be decreased. Contractures are frequent. In many cases there is dissociation between various parts of the body. Certain reflexes are strengthened or weakened. In negativism there is a close interweaving of somatic and mental factors.—*C. W. Fox* (Rochester).

951. Campbell, C. M. The work of the psychopathic hospital. *Proc. First Int. Cong. on Ment. Hygiene*, 1932, 1, 353-371.—A general discussion of "the work done in a psychopathic hospital (Boston), the medical and medico-social needs served by it, the methods of dealing with concrete problems, the relation of the hospital to other organizations in the community."—*B. Casper* (Clark).

952. Coplans, E. Some observations on neurasthenia and shell-shock. *Lancet*, 1931, 221, 960.—The author was afforded an excellent opportunity to study the persistence of post-war neurosis while in charge of the London patients of the Ex-Services Welfare Society. 527 ex-service men were seen eight years or longer after the armistice. At least 80% of this number were unskilled laborers. It was rare to deal with an artisan or a craftsman. Usually the case showed a history of periodic breakdowns at work. These were referable to one or several of the following causes: inability to master a task, however simple; actual weakness and fatigue; inability to concentrate; ill-temper and quarrelling. The clinical symptoms were generally tremors of hands, tongue, and eyelids; increased knee-jerk; clammy, moist hands; and tachycardia. The anxiety type of mental attitude was most frequently encountered. It was impractical to treat these cases by psychoanalytic methods, as the man and his family were usually without means of support. After a period of observation the patient was sent to an industrial training center where he was taught by gradual stages to become self-supporting. Treatment was directed toward restoring self-confidence.—*D. J. Ingle* (Minnesota).

953. Craig, M. The importance of mental hygiene in other departments of medical practice. *Proc. First Int. Cong. on Ment. Hygiene*, 1932, 2, 217-231.—In all periods of life disturbed emotion is one of the commonest causes of ill health. Despite this fact the study of mind occupies a very limited place in the field of mental medicine in England today. Knowledge of mental hygiene is needed by the medical profession both for more accurate diagnosis of ailments and for more capable therapeutic methods.—*B. Casper* (Clark).

954. De Jong, H. Die experimentelle Katatonie als vielfache vorkommende Reaktionsform des Zentralnervensystems. (Experimental catatonia as a frequent form of reaction of the central nervous system.) *Zsch. f. d. ges. Neur. u. Psychiat.*, 1932, 139, 468-499.—Artificial catatonia may be obtained in animals by giving them bulbocapnin, cannabis indica, mescaline, certain hormones, and carbon dioxide. Experiments with fecal extracts from catatonic patients are still in progress. Experimental catatonia represents a frequent form of reaction of the central nervous system. The symptoms are catalepsy, negativism, hyperkinesis and certain autonomic phenomena. The writer considers the mechanism of catatonic phenomena to be an expression of an automatic flow of energy from motor nerve-cells whose thresholds of discharge have been reduced toxically. A continuous stream of excitation thus reaches the muscles.—*C. W. Fox* (Rochester).

955. De Saussure, R. Hygiène mentale de la vie quotidienne. (Mental hygiene of everyday life.) *Arch. du bon secours*, 1931, 15. Pp. 35.—The writer distinguishes between absolute and relative mental health. The individual may apparently be healthy so long as he does not succumb to particular dangers and burdens confronting him as he grows to adulthood and into his profession and other duties. The equilibrium is often labile rather than stable. The writer discusses the problems of educating the individual in adjustment, in enjoyment of responsibility, and in insight into social structures. A chapter is devoted to the conquering of mistakes and disillusionments in life.—*C. W. Fox* (Rochester).

956. Doll, E. A. Annual report, dept. of research, Training School, Vineland, N. J. *Tr. School Bull.*, 1932, 36, 113-124.—Editorial work rather than new research was stressed. The birth-injury book was published by Macmillan, a volume of 239 pages entitled *Mental Deficiency Due to Birth Injuries. Twenty-Five Years* was published and contains the six major addresses delivered at the 25th anniversary in 1931, supplemented by three articles. The volume is a tribute to the early work of H. H. Goddard and those who followed him. Several articles reporting work on idiocy appeared. At the request of the Commissioner a bulletin was prepared for the Board of Control. A list of articles published contained 11 items. The extensive use of motion pictures is mentioned. A travelogue of the institution has been made showing representative activities of the various departments. The use of motion pictures as a scientific method and for educational purposes is increasing rapidly. Lectures were given by the staff. A number of surveys have been completed in the clinic.—*E. M. Achilles* (Columbia).

957. Eliasberg, W. Bemerkungen zur Arbeitspathologie und ihre Methodik. (Remarks on occupational pathology and its methods.) *Zentbl. f. Psychotherap.*, 1932, 5, 135-138.—This discussion is based on E. Stransky's statistical studies (*Wien. klin. Woch.*, 1931), which show that among women domestic employees in Vienna mental and nervous morbidity is twice as great as in their population

group as a whole. Among housekeepers the morbidity is much lower, although their environment and wages are about the same, and their average age is higher. Eliasberg and Stransky analyze, on the basis of special patterns of social culture, the particular motivations connected with domestic work which explain this striking prevalence of mental disease. Certain occupations produce abnormal individuals because they are indispensable. This is particularly true of domestic employment, the essential of which, from the socio-psychological standpoint, is continuous readiness to do a wretched kind of work under continuous subordination. Two psychological types are attracted by these conditions: those who find satisfaction in dependence, and build up their self-esteem on the conviction that they are indispensable; and those whose desire for dependence is felt as resignation. If the individual is incapable of these attitudes, a permanent inner resentment arises—the feeling that the whole personality is frustrated. Hence the allurements of sickness and the "predisposition" to it. The difference in the position of the housekeepers is that they are their own mistresses. An important factor in the resentment, even among class-conscious proletarian girls, is the fact that the employer is a woman.—*M. E. Morse* (Hyattsville, Md.).

958. Emerson, H. The magnitude of nervous and mental diseases as a public-health problem. *Proc. First Int. Cong. on Ment. Hygiene*, 1932, 1, 209-229.—The great incidence of nervous and mental diseases among various population groups is stressed and the need for preventive measures emphasized.—*B. Casper* (Clark).

959. Fox, E. Community schemes for the social control of mental defectives. *Proc. First Int. Cong. on Ment. Hygiene*, 1932, 2, 1-19.—Outlines a plan for the community care and training of the mentally deficient child. "Defectives who appear likely to remain in the community should, so far as possible, be given training whilst at home or boarded out in families. The lower grades who cannot go to schools or classes should attend centers or receive the visits of home teachers. If no training on these lines is possible, or if the homes are bad, the parents uncooperative, then the case should be sent to an institution."—*B. Casper* (Clark).

960. Fremel, F. Operierter Kleinhirnabscess mit bemerkenswerter Symptomatologie und Vorgeschichte. (Operation for a cerebellar abscess with peculiar symptomatology and previous history.) *Monatssch. f. Ohrenh.*, 1931, 65, 99-102.—The patient, a male 30 years of age, presented signs of paresis of the ocular muscles before the operation, and with the appearance of somnolence the eye movements became dissociated and undulating, a condition usually found in narcosis. During the observation there was present a nystagmus toward the left side, at times a vertical nystagmus, and at times obliquely and inferiorly to the right; there was also present a pronounced areflexia of the cornea on the right, a high degree of ataxia of the right upper and lower extremities, and signs of ataxia on the left. There was a chronic suppuration in the right ear, and a

large perforation and granulations in the antrum. An ophthalmologic study revealed choked disks with hemorrhages on the right. The spinal fluid was clear, the pressure was normal, and the number of cells was normal. At the operation there was found a deep extradural abscess, as well as grayish-black, soft granulations, reaching practically up to the internal auditory canal, but no free pus. The operation was not followed by any improvement. A further puncture revealed a large amount of odorless, sterile pus. The abscess was situated in the nucleus dentatus, compressing considerably the ventricular wall.—*A. S. Schwartzman* (Washington, D. C.).

961. Freud, S. Remarques sur un cas de névrose obsessionnelle (l'homme aux rats). (Remarks on a case of obsessional neurosis—the rat man.) *Rev. fr. de psychanal.*, 1932, 5, 322-389.—*Collected Papers*, 3, 293-383.—*R. R. Willoughby* (Clark).

962. Freud, S. De quelques mécanismes névrotiques dans la jalousie, la paranoïa et l'homosexualité. (Some neurotic mechanisms in jealousy, paranoia and homosexuality.) *Rev. fr. de psychanal.*, 1932, 5, 391-401.—*Collected Papers*, 2, 232-243.—*R. R. Willoughby* (Clark).

963. Gabriel, E. Bemerkungen zur Wiederöffnung der Trinkerheilstätte am Steinhof. (Remarks at the re-opening of the institution for alcoholics at Steinhof.) *Zsch. f. psych. Hygiene*, 1932, 5, 51-63.—Gabriel discusses: the advantages and disadvantages in the connection of institutions of this kind with mental hospitals; the types of cases suitable for curative measures (physically healthy persons under 55 years, having insight and determination); treatment, which is based on the principles of mental hygiene; and the care of patients (the vast majority of all chronic alcoholics) who cannot be rehabilitated, and require institutional care indefinitely. "Cures" represent only a strengthening of the will, as the susceptibility to alcohol and the craving for it are incurable. About one third of the cases treated remain cured.—*M. E. Morse* (Hyattsville, Md.).

964. Genil-Perrin, J. Syphilis and mental hygiene. *Proc. First Int. Cong. on Ment. Hygiene*, 1932, 1, 406-437.—A detailed outline of the relationship between syphilis and mental hygiene, divided into two main sections. The first section, entitled *Syphilis as a Factor in Psychopathy* treats of injury caused by syphilis to the nervous system, and of mental changes accompanying hereditary and acquired syphilis. The second section is a consideration of *Prophylaxis of the Psychopathic Complications of Syphilis*.—*B. Casper* (Clark).

965. Glueck, B. Organization of special types of clinical service: psychoanalysis and child guidance. *Proc. First Int. Cong. on Ment. Hygiene*, 1932, 1, 535-549.—In this paper on special types of clinical service, the author has chosen to emphasize one type of service (child guidance) and one type of approach in connection with that service (psychoanalysis). The bases for some of the more important principles underlying the theory and practice of child guidance are reviewed, and the relationship of these principles

to psychoanalytic psychology are examined.—*B. Casper* (Clark).

966. Kahn, E., & Cohen, L. H. Conflict and integration in schizophrenic development. *Amer. J. Psychiat.*, 1932, 11, 1025-1034.—Report of a case representing "a type of schizophrenic development which has not as yet received adequate attention." The authors are of the opinion that "the interpretation of this particular type of schizophrenic development may best be made in terms of the dynamic effect of anamastic paranoiac *Anlagen* which act towards non-regressive integration."—*S. J. Beck* (Boston Psychopathic Hospital).

967. Kanner, L. Supplying the psychiatric needs of a pediatric clinic. *Amer. J. Orthopsychiat.*, 1932, 2, 400-406.—A description of the plans for and accomplishments of cooperation between psychiatrist and pediatrician at the Harriet Lane Home for Invalid Children, the Pediatric Clinic at Johns Hopkins Hospital.—*H. Peak* (Yale).

968. Kimura, R. Psychoanalytic Untersuchungen über die Wahnbildung der Paranoia. I. u. II. Mitteilung. (Psychoanalytic investigations of the delusions of paranoia. I. & II.) *Arbeit. Psychiat. Inst. d. K. Japan. Univ. zu Sendai*.—Psychoanalytic study of two paranoiacs showed that the patients were sons of very strict fathers and that the Oedipus complex was therefore very pronounced. It was reawakened by difficulties of existence (regression). Feelings of hostility were projected outward to father-substitutes—in one case the factory director and in the other the father-in-law—and perceived as persecution on the part of these persons. The writer cites a third case of pathological jealousy. The patient, seeking escape from the tension between the super-ego and an unconscious polygamous tendency, projected the unconscious wish upon his wife and became the victim of a jealous obsession. These three cases of delusion through the mechanism of projection also presented evidence of fixation on a narcissistic level. A fourth case, a student, suffered from delusions of persecution and reference. Analysis revealed a severe moral conflict resulting from a sexual act which he had committed without a sense of responsibility. The ego projected the reproach of the strict super-ego outward and the patient thus believed himself persecuted. A fifth case, a young farmer, suffered from delusions of persecution, together with demoniacal and hypochondriacal delusions. He complained of severe testicle pains and believed that some one had infected him with gonorrhea by magic, so that coitus would no longer be possible. He desired castration of the right testicle. It became clear in the analysis that the patient had pronounced homosexual tendencies, the projection of which caused delusions of persecution.—*J. L. Jervis* (Yale).

969. Krakora, S. Vnitní sekrece a duševní choroby. (Internal secretion and mental disorders.) *Rev. v neur. a Psychiat.*, 1931, 28, 264-275.—The author analyzes existing opinions concerning the endocrine glands with relation to mental and neuropathic disorders. He shows the poverty of positive and incontestable facts, but expresses the conviction that

positive information may be arrived at if our knowledge of the actual relation between the endocrine glands be increased along with our knowledge of the function of the sympathetic and its relation to the endocrine glands. By utilizing biological and chemical methods of exploration we may arrive at an understanding of this relation, which will be shown to be more complex than is at present believed.—*E. H. Kemp* (Clark).

970. Leonhard, K. Besonderheiten an den hallucinatorisch-paranoiden Bildern nach epidemischer Encephalitis. (Details concerning hallucinatory paranoid images after epidemic encephalitis.) *Zsch. f. d. ges. Neur. u. Psychiat.*, 1932, 138, 780-807.—In three cases of epidemic encephalitis, hallucinatory and paranoid phenomena were found to accompany neurological symptoms. In one of the cases these phenomena accompanied post-encephalitic alteration of character. The hallucinations are predominantly visual and scenic; they appear, as a rule, only just before or just after sleep. Sometimes the hallucinations are taken as real, sometimes not. Concentration and apprehension become difficult.—*C. W. Fox* (Rochester).

971. Levy-Suhl, M. Die Funktion des Gewissens in den neurotischen Krankheiten. (The function of conscience in neuroses.) *Arzt u. Seelsorger*, 1931, H. 26. Pp. 32. M. 90.—On the basis of a long practice as psychiatrist the author explains that the human being as a person cannot be understood solely from biological and psychological points of view, but obligations must also be taken into account.—*A. Römer* (Gautzsch bei Leipzig).

972. Lindemann, E. Psychological changes in normal and abnormal individuals under the influence of sodium amyta. *Amer. J. Psychiat.*, 1932, 11, 1083-1091.—The drug was administered to 30 patients, most of whom were catatonic or depressed; and to 6 normals. A marked change was noted in the behavior of certain of the patients, and a change, less noticeable, in the normals. The thought content, not otherwise obtainable, of stuporous patients was thus made accessible to study.—*S. J. Beck* (Boston Psychopathic Hospital).

973. Magenau, O. Die Behandlung der akuten Schizophrenie in der freien Praxis. (The treatment of acute schizophrenia in free practice.) *Zsch. f. d. ges. Neur. u. Psychiat.*, 1932, 139, 318-323.—The notion that acute schizophrenia resists therapeutic influence has been largely disproved. An early treatment of the disorder is extremely important.—*C. W. Fox* (Rochester).

974. Margulies, M. Hypnose als Hilfsmittel psychiatrischer Begutachtung. (Hypnosis as an aid in psychiatric examination.) *Ärztl. sachverständ. Ztg.*, 1931, 37, 371-373.—A 23-year-old exhibitionist seemed to have partial amnesia for his actions. These could be discovered neither in deep hypnosis nor in unconstrained analysis. These facts, together with certain peculiarities of the subject's actions, led the writer to report in favor of the defendant.—*C. W. Fox* (Rochester).

975. Marui, K. Psychoanalytische Studie über einen Fall hysterischer Amaurose. (A psychoanalytic study of a case of hysterical amaurosis.) *Arbeit Psychiat. Institut d. K. Japan. Univ. zu Sendai*.—An elementary school teacher fell unconscious before the eyes of the school director, and upon coming to himself presented a typical picture of hysterical amaurosis. This condition persisted for about four months until another fall, this time quite accidental, restored his ability to see. Analysis of the patient revealed a conflict arising from his love for a woman colleague. The director had intervened in this relationship. Psychoanalytically interpreted, the blindness signified loss of sight control on the part of the ego, the eye being the servant of the suppressed sexual impulse; the loss of consciousness was attributed to withdrawal of the libido and ego energy into the ego reservoir, upon restoration of which the eye was robbed of its share. Feelings of guilt and necessity for punishment resulting from the conflict between the ego and the super-ego succeeded, through the mechanism of conversion, in causing the loss of vision. When accident (the second fall) threatened the life of the patient, the ego regained its control over the eye, and thus initiated the mechanism of recovery.—*J. L. Jervis* (Yale).

976. Mayendorf, N. v. Die Seelenblindheit und ihre cerebrale Mechanik. (Mental blindness and its cerebral mechanism.) *Zsch. f. d. ges. Neur. u. Psychiat.*, 1932, 138, 758-768.—An address read at the International Neurological Congress at Bern in 1931. An important point is that "in no case does the phenomenon of mental blindness provide an argument for separate substrata in the brain for images of perception and images of imagination."—*C. W. Fox* (Rochester).

977. Mayendorf, N. v. Ueber die Hygiene des Kopfschmerzes bei der Neuropathie. (The hygiene of neuropathic headache.) *Zsch. f. psych. Hygiene*, 1932, 5, 148-150.—Chronic headache is one of the most frequent and tormenting symptoms of the neuropathic constitution. Undoubtedly it has, like migraine, a definite *Anlage*. Treatment brings only transient relief, since the congenitally abnormal nervous system is only slightly accessible to therapeutic influences. Hence hygienic preventive measures, beginning in childhood, which adapt the environment to the pathological *Anlage*, are the chief reliance. The first step—a difficult one for parents—is to recognize that a child is a neuropath. The most important rule for the upbringing of such children is to avoid emotional stress, since this is more prolonged and intense than in the normal. The neuropathic child lives in a continual state of anxiety, which prevents sustained interest and attention. The demands of school life must be very moderate, and prolonged rest periods are necessary. As to a vocation, the neuropath should not choose one demanding machine-like regularity, but rather a "free calling," not associated with excitement, hurry, or great responsibility. Neuropaths are capable, however, of superior accomplishment if they can work under conditions

which take their limitations into account.—*M. E. Morse* (Hyattsville, Md.).

978. Meyer, A. The organization of community facilities for prevention, care, and treatment of nervous and mental diseases. *Proc. First Int. Cong. on Ment. Hygiene*, 1932, 1, 237-257.—A detailed history of the development of organized methods of treating nervous and mental diseases in America. The author presents suggestions for further improvements needed.—*B. Casper* (Clark).

979. Neumann, H. Demonstration eines Falles von kongenitaler Missbildung beider Ohrmuscheln mit Atresie. Merkwürdige Sprache. (Demonstration of a case of congenital malformation of both pinnae with atresia. Peculiar speech.) *Monatssch. f. Ohrenh.*, 1931, 65, 108-111.—The history revealed a consanguinity of the parents. The patient, the only child, 3 years of age, presenting a malformation of both pinnae, was always well and showed no disturbances in hearing, and could speak a few words. The speech of the child is peculiar. It is dominated by vowels, while the consonants are omitted. Instead of the pinnae there are found only fleshy ridges. The auditory canals on both sides appear only as shallow grooves. The child is able to hear and the vestibular apparatus is stimulable on both sides. The soft palate shows no peculiarities and is normally movable. A Roentgen picture revealed a defect in the os tympanica. The pneumatic system on both sides is well developed. In the middle and inner ear no pathological changes are demonstrable on either side. The child was treated surgically, and the operation not only contributed to the appearance of the patient but also improved the speech.—*A. S. Schwartzman* (Washington, D. C.).

980. Neumann-Bahn, K. Psychische Hygiene in Finnland. (Mental hygiene in Finland.) *Zsch. f. psych. Hygiene*, 1932, 5, 151-156.—This is an outline of the mental-hygiene movement and the provisions for the mentally sick and defective in Finland, with the history of their development, beginning with the establishment of a psychiatric clinic at Helsingfors University in 1841. Boarding-out of mental patients was begun in 1888, and is practised to a much greater extent than in Germany. The head nurses in the mental hospitals are all educated women, graduates of general nursing schools requiring high-school graduation for admission, who have had post-graduate psychiatric training. Trained occupational therapists are employed in the women's wards. Licensed psychiatric social workers are employed in all parts of the country. They are graduate nurses with a post-graduate course in public health and social work. The mental-hygiene movement began in 1897 with the after-care of mental patients. The Society for Mental Hygiene supports a child guidance clinic and a sanatorium for neurotics and mental convalescents, and also publishes a journal. The dark side of the picture, however, is the excessive alcoholism, the result of the prohibition law during the last 13 years. Before prohibition, Finland was one of the most sober countries. With

some restrictions, alcohol is soon again to be legalized.—*M. E. Morse* (Hyattsville, Md.).

981. *Panse, F.* Verhütung und socialmedizinische Beurteilungen der gewerblichen Schädigungen des Zentralnervensystems. (Prevention and social-medical consideration of industrial injuries to the central nervous system.) *Zsch. f. psych. Hygiene*, 1932, 5, 133-146.—The demands which industrial injuries are making on neuropsychiatry are growing in importance and complexity. Industry is making use of an increasing number of substances which have a toxic effect on the nervous system. Furthermore, the judgment of the neurologist and psychiatrist is important in many industrial diseases as regards compensation. Panse sketches the effects on the nervous system of the most important poisonous chemicals used in industrial processes. He also discusses injuries to the central nervous system from electricity. Characteristic organic lesions of the nervous system caused by electricity are more common than was formerly believed. Paralyses of the spinal atrophic type, due to vasomotor injuries in the anterior horns, are not rare, and may occur with relatively low tensions. Permanent cerebral injury (also dependent on vasomotor lesions) may occur when the current passes from limb to limb, as well as with electric burns of the scalp.—*M. E. Morse* (Hyattsville, Md.).

982. *Petrén, A.* Från riksdagen. (From the Congress.) *Svensk. läkart.*, 1932, 29, 1201-1206.—The article summarizes several changes in Swedish medical laws; among others, insane patients shall not be admitted to wards for the insane in any hospital without control from the district state hospital for the insane.—*M. L. Reymert* (Mooseheart Laboratory for Child Research).

983. *Richmond, W.* The dementia precox child. *Amer. J. Psychiat.*, 1932, 11, 1153-1159.—The "precox" process is a deterioration at work from early ages. Such cases, in childhood, are frequently taken for mental defectives, but can easily be distinguished from the latter since, in intelligence and development, they measure at age in early years, but later deteriorate in a manner comparable to that seen in organic psychosis.—*S. J. Beck* (Boston Psychopathic Hospital).

984. *Roemer, H.* To what extent does public opinion help, and to what extent does it impair, the work of mental hygiene? *Proc. First Int. Cong. on Ment. Hygiene*, 1932, 1, 266-280.—The author points out that in Germany there is still a widespread prejudice against the insane, insane asylums and alienists. This has been a great hindrance to the development of psychiatric care, largely because of failure to modernize antiquated laws. On the other hand, new trends in the administration of social service and of law are in complete accord with the demands of modern treatment of the insane, and, through the influencing of public opinion, will lead eventually to improvement in the field of mental hygiene.—*B. Casper* (Clark).

985. *Rosenblatt, M.* Zur Pathogenese der Recurrenslähmungen. (Pathogenesis of paralysis of the recurrent nerve.) *Monatssch. f. Ohrenhk.*, 1931, 65, 154-158.—The author describes four cases of this nature. In case 1 the bilateral paralysis of the recurrent nerve was a partial expression of rapidly progressing, acute bulbar paralysis conditioned by typhoid toxins. The motor portion of the vagus nucleus was apparently mostly affected. In the second and third cases the paralysis of the recurrent nerve was found in association with a picture of toxic polyneuritis whereby the vagus or its nuclei were affected. In the fourth case the affection of the recurrent nerve was unilateral, and the neuritis of the recurrent nerve appeared simultaneously with an erysipelas. The paralysis of the vocal cords was homolateral with the process of erysipelas.—*A. S. Schwartzman* (Washington, D. C.).

986. *Rosenstein, L. M.* La tendencia social profiláctica en la psiquiatría clínica y psicohigiene. (The prophylactic social tendency in clinical psychiatry and mental hygiene.) *Arch. de neurobiol.*, 1932, 12, 255-274.—The methodological problems as they exist today in Soviet Russia keep up with the progress of modern science. Psychiatry and medicine in general belong to those applied sciences which are built upon the pressing necessities of society. Psychiatry, more than any other branch of medicine, reflects the ideology of society. Revolutionary periods exercise a special influence on the development of psychiatry. The French Revolution produced Pinel; the period of '48 produced a number of psychiatrists of the '60's and '70's; the World War and the Russian Revolution have given us the mental-hygiene movement. The present hegemony of German psychiatry and its development begin with Griesinger, the representative of the psychiatric progress of the revolutionary period of '48. One of the peculiarities of the Russian psycho-prophylactic tendency in comparison with that of America and of Western Europe is that the Russians consider their mental-hygiene movement a revolutionary movement in psychiatry. Prophylactic psychiatry has grown beyond the walls of hospitals and dispensaries. The active mental-hygiene work which is carried out among the normal population and the mental-hygiene observation of healthy individuals who are working with the object of protecting themselves against mental disorders are already established facts in the U.S.S.R. Special attention is given to childhood, adolescence and maturity, as they are the main periods in which psychic disorders originate. The socio-prophylactic tendency in clinical medicine is at present only the beginning of a psychiatric transformation in the mental hygiene of the future society.—*E. Johns* (New York City).

987. *Rüdin, R.* The significance of eugenics and genetics for mental hygiene. *Proc. First Int. Cong. on Ment. Hygiene*, 1932, 1, 471-488.—The field of mental hygiene has been mainly concerned with those already born. The paper gives reasons for the extension of the field to include prevention of pro-

creation of sickly or abnormally inclined children.—*B. Casper* (Clark).

988. Sano, F. B. The care of the insane outside of institutions. *Proc. First Int. Cong. on Ment. Hygiene*, 1932, 1, 379-391.—A description of the colony at Gheel, Brussels, where patients are housed with "foster-families," and an exposition of the benefits of family care of the insane.—*B. Casper* (Clark).

989. Schaffer, K. Ueber die drei Formen der "amaurotischen Idiotie." (The three forms of amaurotic idiocy.) *Zsch. f. d. ges. Neur. u. Psychiat.*, 1932, 139, 790-801.—There is a form of idiocy which can appear at any age with progressive ganglio-cellular degeneration. The infantile form may involve macular degeneration and convulsions, the juvenile form retinitis pigmentosa and convulsions. In the first form the alteration of fundi is a result of cerebral degeneration. In the second, there is a retinal degeneration-process of an heredo-degenerative nature. In adult and later forms, there is no change in fundi, either direct or indirect.—*C. W. Fox* (Rochester).

990. Schilder, P. Scope of psychotherapy in schizophrenia. *Amer. J. Psychiat.*, 1932, 11, 1181-1187.—The rôle of the psychological in the treatment of the somatic is discussed. "It is clear that as long as we do not have any reliable somatic therapy, we have to use our psychotherapeutic procedures," and the author adds that "psychotherapy is obligatory in every case of schizophrenia." But while much can be done for the schizophrenic patient, it is an open question as yet whether he can be cured.—*S. J. Beck* (Boston Psychopathic Hospital).

991. Schneider, K. Ueber Depressionszustände. (On states of depression.) *Zsch. f. d. ges. Neur. u. Psychiat.*, 1932, 138, 584-589.—A brief theoretical discussion of non-reactive (exogenous and endogenous) and reactive states of depression.—*C. W. Fox* (Rochester).

992. Schultz, J. H. "Organneurosen" als psychotherapeutisches Problem. ("Organ neuroses" as a psychotherapeutic problem.) *Fortsch. d. Neur., Psychiat. u. Grenzgeb.*, 1932, 4, 337-360.—Schultz outlines the general viewpoints in the problem. The main topics discussed are: (1) Is the concept of a neurosis of a single organ justifiable; the answer being that a functional disturbance apparently limited to one organ is probably not a neurosis, but an isolated destructive process. (2) Division of "organ neuroses" into two major groups, in which respectively constitutional, mechanical, or habitual factors, and second, emotional factors predominate. (3) The relationships of the total personality to functional disturbances, particularly the "somatic misunderstanding"; neuroses as manifestations of anxiety and guilt-feelings; loss of self-confidence; and adaptation. (4) The extent to which physical functions can be influenced by purely psychic factors. Experimental hypnosis proves that the possibility of psychic conditioning extends even to the deepest physico-chemical reactions, and ceases only with local

death. (5) Treatment; Schultz recommends for the milder cases his system of "autogenous training," which is a self-regulation of organic functions and a relief of tension through concentration; in reality, a self-hypnosis. In determining the type of treatment indicated for any neurosis, the decisive consideration is the "existential meaning," i.e., the extent to which the neurosis affects psychically indispensable things—accomplishment, pleasure, human relationships, the patient's ideas of life and the cosmos; and his feelings about himself.—*M. E. Morse* (Hyattsville, Md.).

993. Sommer, R. Die Verhandlungen über psychische Hygiene in Paris vom 29 bis 31 Mai 1932. (Transactions of the committee on mental hygiene at Paris, May 29-31, 1932.) *Zsch. f. psych. Hygiene*, 1932, 5, 156-160.—This is a report of the proceedings of the European executive committee for mental hygiene. The business transactions were preparatory to the second International Congress for Mental Hygiene, to be held in Paris in 1935, and were devoted to the formulation of a program for the meeting; to building up the European organization for mental hygiene, which originated in 1927; and to broadening the international executive committee, appointed at the Washington Conference in 1930, to include representatives of all European countries. It was decided to hold an annual meeting of this committee in connection with the particular national society which is having a congress. In 1933, this will be held in Rome. A resolution in favor of extramural psychiatric activities was unanimously adopted. The international unification of statistics of mental diseases was discussed, and the various national societies were asked to express their views on the classification of the psychoses to the secretary of the international committee, J. Genil-Perrin. The program of the International Congress in 1935 will be built around research into the causes of mental diseases, prevention, and the fight against psychic abnormality in its broadest sense.—*M. E. Morse* (Hyattsville, Md.).

994. Stokes, A. P. The founding of the mental hygiene movement in 1908. *Proc. First Int. Cong. on Ment. Hygiene*, 1932, 1, 497-501.—*B. Casper* (Clark).

995. Störring, G. E. Ein Beitrag zum Problem der Zwangpsychopathie dargestellt an dem Fall eines anankastischen Psychopathen. (A contribution to the problem of the psychopathy of compulsion as shown in the case of an anankastic psychopath.) *Zsch. f. d. ges. Neur. u. Psychiat.*, 1932, 139, 589-648.—A case study of an intelligent, educated patient who can observe himself very well. Since in this case the origin of the compulsive phenomena seems quite transparent, the account may shed light upon the difficult problem of the genesis of compulsions. The patient manifests pronounced emotionality, especially anxiety. Certain environmental influences, as in the family, strengthened this predisposition toward anxiety. Fear concerning masturbation was heightened by a teacher. The patient's emotions pass away slowly and go over into an affective mood; his motor

abreactions from emotions are weak; he lacks positive goals and is unable to assert his ego against anxiety. In these factors lie the cause of his compulsions. There is a brief discussion of therapy.—C. W. Fox (Rochester).

996. Strasser, C. *Kritik und Grundsätze der Psychotherapie.* (Critique and fundamental axioms of psychotherapy.) *Zsch. f. d. ges. Neur. u. Psychiat.*, 1932, 138, 594-609.—The writer's purpose is to overthrow relativism in medical psychology and psychiatry. Concepts of preservation and development, the normal and abnormal, laws of life, mind, consciousness, health and disease are discussed.—C. W. Fox (Rochester).

997. Strecker, E. A. *Psychiatric education.* *Proc. First Int. Cong. on Mental Hygiene*, 1932, 1, 638-654.—A criticism of the inadequate psychological education of the medical practitioner, the psychiatrist, the social worker, and the nurse.—B. Casper (Clark).

998. Toulouse, E. *The organization of the psychiatric hospital and its rôle in social life.* *Proc. First Int. Cong. on Ment. Hygiene*, 1932, 1, 295-342.—Description by one of the founders, of the creation, organization and activities of a center of psychiatry and mental treatment in Paris. Specific suggestions for a national organization are included.—B. Casper (Clark).

999. Tumiati, C. *Il primo quinquennio di attività del servizio di profilassi mentale della Provincia di Venezia.* (The first five years of the mental health service of the Province of Venice.) *Igiene ment.*, 1932, No. 1, 6-17.—R. Calabresi (Rome).

1000. Ullmann, E. V. *Kopfschmerz und andere nervöse Störungen in ihrer Beziehung zum Ganglion sphenopalatinum.* (Headache and other nervous disturbances in their relation to the sphenopalatine ganglion.) *Monatssch. f. Ohrenh.*, 1931, 65, 828-840.—Headaches, in so far as they are not due to a suppurative process or a tumor, neuralgia in the region of the head, or numerous other nervous phenomena which are associated to a lesser or greater extent with painful sensations, may be included in the syndrome described for the first time by Sluder. This disease picture or group of symptoms has not heretofore been fully appreciated. Not only the headache and the neuralgia, but also phenomena which are generally designated as functional or hysterical disturbances, such as *globus hystericus*, *singultus*, *glossodynbia*, *myalgia* in the region of the neck and back, may be eliminated completely by the injection of some anesthetic substance into the region of the sphenopalatine ganglion. The technique of this treatment is relatively simple and can be carried out by any skilled rhinologist. This method of treatment is not associated with any danger.—A. S. Schwartzman (Washington, D. C.).

1001. Vermes, E. *Linksseitiger Schläfenlappenabszess bei chronischer Mittelohrentzündung.* (Left temporal lobe abscess in chronic inflammation of the middle ear.) *Monatssch. f. Ohrenh.*, 1931, 65, 102-107.—The author describes a case where a suppurative

cholesteatoma was followed by the formation of a temporal abscess on the left side, the clinical demonstration of which was made only 19 days after the radical operation. Symptoms pointing to a brain abscess, such as aphasia, headache, etc., appeared 2 days after the radical operation, but could not be properly evaluated at first because of the lack of general brain symptoms and the absence of corresponding local symptoms. The diagnosis was further complicated by the peculiar psychic behavior of the child, which was explained at first by the appearance of menstruation 12 days after the operation. At this time the clinical picture changed for the worse and local symptoms appeared. During the next few days the dura of the middle cranial fossa showed some bulging and a test puncture revealed pus. The removal of the pus was followed by considerable improvement in the general condition.—A. S. Schwartzman (Washington, D. C.).

1002. Vetter, A. *Warum haben wir eine ärztliche Psychotherapie?* (Why do we have a medical psychotherapy?) *Arzt u. Seelsorger*, 1931, H. 25. Pp. 15. M. 60.—Even in the Christian Occident there may occur a sharp distinction between religious and scientific conceptions of suffering. A new valuation of religious truth is beginning along with doubt in science as the only enlightenment.—A. Römer (Gautzsch bei Leipzig).

1003. Warner, G. L. *A few representative cases of pyromania.* *Psychiat. Quar.*, 1932, 6, 675-690.—One of the few types of criminal insane that are cooperative and amenable to treatment is the pyromaniac (a term strictly referable only to cases presenting no conscious motivation, the act being so little the person's own that, even if otherwise normal, he cannot display regret). The pyromaniac's conduct may be impulsive or compulsive. The impulse to set fire is most frequent among young people in an unbearable situation, which in some cases lies in a sexual affair or in ungratified sexual cravings. Others experience direct sexual excitement through setting or watching the fire: a close association between "fire" and "passion" is indicated. Pyromania may be part of a more serious mental disorder, but some persons suffering from it may later live a normal life. Four cases are cited in detail: in (1) the act of setting fire was clearly a substitute for masturbating; in (2) the frustrated effort to lead a normal heterosexual life was involved; in (3) the compulsion seems to have been bound up with an unadjusted Oedipus situation; in (4) the patient deteriorated so rapidly to infantilism that only a general connection between pyromania and homosexual cravings could be inferred from the limited data that had been secured.—E. T. Burr (Columbia).

1004. White, W. A. *The origin, growth, and significance of the mental hygiene movement.* *Proc. First Int. Cong. on Ment. Hygiene*, 1932, 1, 523-533.—B. Casper (Clark).

1005. Wildermuth, H. *Schizophrenie von innen.* (Schizophrenia from the inside.) *Zsch. f. d. ges. Neur. u. Psychiat.*, 1932, 139, 53-74.—Studies of the diaries of two schizophrenics. The writer concludes that we can grasp and understand psychologically

many details in the acute and chronic states, but the total states of the patients remain closed to our insight and empathy.—*C. W. Fox* (Rochester).

[See also abstracts 790, 854, 904, 908, 916, 1016, 1040, 1063, 1067, 1069, 1074, 1093, 1098, 1104, 1111, 1114, 1127.]

SOCIAL FUNCTIONS OF THE INDIVIDUAL

1006. Alexander, F. Mental hygiene and criminology. *Proc. First Int. Cong. on Mental Hygiene*, 1932, 1, 745-773.—Since criminal behavior in the adult may be due to failure of the child to adjust completely to the demands of society, to a persistence of an asocial part of the child personality, the use of psychoanalytic methods in diagnosis and treatment of the criminal is urged.—*B. Casper* (Clark).

1007. [Anon.] Criminaliteit in Amsterdam en van Amsterdammers. (The criminality of Amsterdam and its citizens.) *Status. mededeel., Bur. v. Stat. d. Gemeente Amsterdam*, 1932, No. 94. Pp. xlvi + 87.—(*Soc. Sci. Abst. IV*: 15749).

1008. Arbaugh, G. B. *Revelation in Mormonism; its character and changing forms*. Chicago: Univ. of Chicago Press, 1932. Pp. x + 252. \$3.00.—The author traces the entire course of the revelation process in Mormonism, from Sydney Rigdon to the present day, with particular attention to the motives and situations which gave rise to it and to its effects upon the growth and history of the group.—*R. R. Willoughby* (Clark).

1009. Arbman, E. *Seele und Mana*. (Soul and mana.) *Arch. f. Religionswiss.*, 1931, 29, 293-394.—(*Soc. Sci. Abst. IV*: 14307).

1010. Bates, S. *The prison of the future*. *Proc. First Int. Cong. on Ment. Hygiene*, 1932, 2, 515-525.—This paper, by the director of the Bureau of Federal Prisons of the United States, declares that America has not solved the problem of the prison, and suggests four ways in which the prison of the future will differ from the prison of the past: (1) Prison buildings and equipment will be devised so as to lend themselves to a constructive program of rehabilitation. (2) Prisons will be manned by those trained in the science of human nature. (3) Prison inmates will be provided with steady and productive labor. (4) Corrective treatment will be individualized.—*B. Casper* (Clark).

1011. Becker, H., & Brunner, D. K. *Some aspects of taboo and totemism*. *J. Soc. Psychol.*, 1932, 3, 337-353.—After reviewing the Freudian explanation of taboo and totemism and some of the more important criticisms which have been made of it, the authors present an alternative view which they believe avoids some of the difficulties of the older views. Specifically, they accept the Freudian thesis that emotional ambivalence and projection give rise to taboo, while the addition of unconscious displacement provides for totemism. They differ in that they believe only one or a few neurotic or psychotic individuals need to have exhibited these mechanisms; the perpetuation of the taboo or totem depends on the position of the neurotic as a priest or other leader in the tribe. Thus the untenable Freudian view of the neu-

rotic nature of all primitive society is avoided. It is also unnecessary to hold that the two are interdependent phenomena. The attempted explanation is held at best to be only a partial solution of the whole problem.—*E. B. Newman* (Harvard).

1012. Beltrán, J. R. *El crimen sexual*. (Sex crime.) *Rev. de crim. psiquiat. y med. leg.*, 1931, 18, 165-181.—(*Soc. Sci. Abst. IV*: 14076).

1013. Benjamin, P. L. *The family society and the depression*. *Ann. Amer. Acad. Pol. & Soc. Sci.*, 1932, 160, 135-143.—A discussion of the effects of the depression upon family social work. The depression has caused an enormous increase in social welfare work, an increase in funds as well as in the number of paid and volunteer workers. Due to the fact that unemployment is so widespread, a great deal more emphasis has been placed on relief aid than in previous years, and as the economic depression continues the amount of aid per family is gradually being diminished. The resulting effects on the family and upon children will be such as to produce an unhealthy generation of seriously maladjusted individuals.—*C. C. Neet* (Clark).

1014. Bernabei, M. *Maria Baskirtsewa. L'eroina dell'io*. (Marie Baskirtseff. The heroine of the ego.) Milan: Soc. ed. Dante Alighieri, 1932. Pp. viii + 130. Lire 5.00.—The author presents a psychological essay upon the personality of the celebrated Russian artist, and opposes himself to those who see in her a complete lack of all feminine character and exaggeration of cerebrality, on the basis of the assertion that there are no women of genius. He cites the spontaneity, warmth, and sensibility of Marie Baskirtseff, qualities which existed in spite of her wilful character and intellectual precocity, and he emphasizes particularly the narcissism (physical and moral) which led her to the adoration of herself and the will to succeed.—*R. Calabresi* (Rome).

1015. Boothe, V. *Gainfully employed women in the family*. *Ann. Amer. Acad. Pol. & Soc. Sci.*, 1932, 160, 75-85.—The author presents the causes for women entering industry or taking a career and the beneficial and harmful effects of such procedures. The most important cause for women in industry is one of economic necessity, whereby the insufficient wage of husband or father may be supplemented. The vocational interests of college-bred women have frequently pointed to a vocational career rather than one of marriage. The dual rôle played by women in a profession and in the home brings about family disorganization and maladjustment. Adjustments will be made; such adjustments, however, will take women into account on a basis more comparable to that of men.—*C. C. Neet* (Clark).

1016. Brandhuber-Etschfeld, F. *Verbrechen und Neurose*. (Criminality and neurosis.) *Int. Zsch. f. Indiv.-psychol.*, 1932, 10, 362-368.—German courts require that for conviction on a charge of crime against person or property alike a malicious intent must be shown. The writer then takes up the problems of motivation involved in various typical crimes, as murder, manslaughter, incendiarism, burglary, hold-up, etc., and shows that only a disturbed, dis-

organized personality could carry out such acts with an evil intent. In other words, the criminal is by every psychological standard a neurotic. It follows with unavoidable consequence that youth must be protected from unfortunate maledirective experiences and trained in a positive way to insure proper personal and social attitudes.—*O. N. de Weerdt* (Beloit).

1017. Bridgman, R. P. Guidance for marriage and family life. *Ann. Amer. Acad. Pol. & Soc. Sci.*, 1932, 160, 144-164.—The author discusses marriage and family life guidance as it is being practised by individuals and groups within the professions of social work, religion, medicine, law and education. Such guidance is not necessarily a function of the church, though it may be, depending on the individual minister in question. Professional social work necessarily involves marital relationship and family guidance, as do several specialties within medicine. The legal profession is concerned only secondarily with marriage guidance, while the profession of education can be considered to be a valuable source of such guidance. "The most important factor in the process of guidance is the use made by the clinician of the professional relationship that develops between himself and his client." The general philosophy of guidance workers is realistic, i.e., to be of use to couples as they become adjusted to marriage and family life.—*C. C. Neet* (Clark).

1018. Bruce, H. A. Sources of American discontent. *Proc. Amer. Acad. Arts & Sci.*, 1932, 67, 43-59.—(Soc. Sci. Abst. IV: 15740).

1019. Bunbury, D. E. Juvenile delinquency in girls in Colorado. *Colorado Univ. Stud.*, 1931, 18, 215-229.—(Soc. Sci. Abst. IV: 14077).

1020. Calhoun, A. W. The early American family. *Ann. Amer. Acad. Pol. & Soc. Sci.*, 1932, 160, 7-12.—A description of the early American family with the factors which have been influential in its development. The most important differences between the colonial family and modern families are (1) the colonial institution was nearer to the "authoritarian conditions of the Old World" and (2) the standards of living of the colonial family was much lower than today, and the duties of the early family included many social and economic functions that in recent times have passed from the home to public function. From these differences can be traced the important alterations in the status of husband, wife, child, distant relatives, family morale, and the rôle of the family as a social institution.—*C. C. Neet* (Clark).

1021. Cantor, N. Crime and the negro. *J. Negro Hist.*, 1931, 16, 61-66.—(Soc. Sci. Abst. IV: 14078).

1022. Carpenter, N. Courtship practices and contemporary social change in America. *Ann. Amer. Acad. Pol. & Soc. Sci.*, 1932, 160, 38-44.—A discussion of the functions of courtship in contemporary western society and the change wrought in these functions by alterations of social customs. Four functions are fulfilled by courtship in contemporary western society: (1) an adjunct to the process of sexual selection, (2) an apprenticeship in mutual accommodation, (3) a stimulus to maturation, and (4)

an essential link in the chain of allure and pursuit by means of which the prospective mates are ultimately carried on toward biological union. The specific patterns of courtship practices in contemporary America have been altered by the following phases of social change: (1) urbanization and "rurbanization," (2) the increased speed of transportation, and (3) the changed status of women, especially the relaxation of inhibitory conventions, widened choice of occupation and coeducational higher education.—*C. C. Neet* (Clark).

1023. Concord, J. C. Remedial agencies dealing with the American family. *Ann. Amer. Acad. Pol. & Soc. Sci.*, 1932, 160, 124-134.—The author outlines the educational, medical, and social agencies which are directed toward the betterment of the family. The diseases of the family which require therapy are of two types, "The maladjustments which impinge upon the family from without, and the complaints from which it suffers internally." The external difficulties are largely due to lack of educational advantages of the parents with resulting economic deficiencies. The internal family difficulties are largely those resulting from personality maladjustments. Some of the preventive and remedial agencies are marital clinics, educational systems with parent education, birth control leagues, maternal and infant hygiene bureaus, public health movements, recreation agencies, the American Red Cross, child-placing and protective agencies, with various marital and divorce laws and juvenile and domestic relations courts. The major portion of the direct assistance offered to families in the improvement of home life is in the large cities, and there the factors which tend to break down the family are most operative. Nevertheless, for the majority of the inhabitants of this country, the services of remedial agencies are unattainable.—*C. C. Neet* (Clark).

1024. Cooper, J. Incest prohibitions in primitive culture. *Primitive Man*, 1932, 5, 1-20.—(Soc. Sci. Abst. IV: 14310).

1025. De Menthon, F. Psychologie comparée des hauts salaires américains et des salaires européens. (Comparative psychology of high American salaries and of European salaries.) *Rev. de psychol. appl. de l'Est*, 1932, 2, 141-150.—A criticism of the American conception of salary from the viewpoint of a foreign social psychologist who believes that the European tradition of a salary minimum for satisfying the needs of the family of the worker is a more sane and sensible doctrine and who discusses the social, economic, and moral effects justifying his belief.—*E. H. Kemp* (Clark).

1026. Dreikurs, R. Über Liebeswahl. (Choice in love.) *Int. Zsch. f. Indiv.-psychol.*, 1932, 10, 339-353.—Human beings, unlike animals, are not helplessly controlled by their instinctive drives, but may defer or modify their responses to meet requirements. The introduction is followed by an analysis of the various motives and tendencies, negative as well as positive, which control the attitudes of men and women in love. These influences are shown to be social rather than biological in character, both in their origin and in their ends. The ends are not always

consciously recognized by the subjects, and just as often they are in reality directed not toward sex satisfaction but toward social acceptance by the lover who has aroused a need, or toward the achievement of some form of prestige in a recognized circle of associates. Inhibitive fears of marital obligations also play a prominent rôle in difficult marriages, perversions, etc.—*O. N. de Weerdt* (Beloit).

1027. Eliot, T. D. The bereaved family. *Ann. Amer. Acad. Pol. & Soc. Sci.*, 1932, 160, 184-190.—The author analyzes and classifies some of the ways in which families and their members have reacted to the crisis of bereavement. Bereavement has its primary and secondary effects. The primary are those built around grief or shock in the family, while the secondary effects are those concerned with the readjustment process. A typical case is cited.—*C. C. Neet* (Clark).

1028. Farnsworth, P. R. Psychology and music. A discussion of certain points of contact. *School Music*, 1932, 32, 3-4.—In the April 1930 issue of the *Musical Quarterly* there appeared two articles covering certain phases of the psychology of music. One by Dean Seashore stressed the contribution psychology has made to music. The other, by Moos, a musician, was written in critical vein. The present writer gives in this issue his views on the value of music tests, on the status of the nature-nurture problem as it touches musical talent, and on the work dealing with the estimated intelligence of musicians. These views fit somewhere between those of Seashore and Moos.—*P. R. Farnsworth* (Stanford).

1029. Flemming, E. G. Best friends. *J. Soc. Psychol.*, 1932, 3, 385-390.—Low but consistently positive correlations were found between the scores of students and the persons designated by them as their best friends, using the fellow-student personality ratings and five tests of intelligence, introversion, social intelligence, and social status previously reported by the author.—*E. B. Newman* (Harvard).

1030. Frank, J. What courts do in fact. *Illinois Law Rev.*, 1932, 26, 645-666; 761-784.—Specific decisions are the result of the judge's hunches. The so-called rules and principles are some of the many hunch producers. Neither the background stimuli nor the congeries labelled "judge's personality" are stated or statable in terms of the conventional legal rules or principles.—*(Soc. Sci. Abst. IV: 13806)*.

1031. Frank, L. K. Social change and the family. *Ann. Amer. Acad. Pol. & Soc. Sci.*, 1932, 160, 94-102.—A discussion of the effect of contemporary technical changes in industry and business on the social aspects of the family. Such changes have shifted the emphasis from "making a living" to "earning a living." The accompanying economic insecurity has transferred a great many of the home functions to industrial or civic centers, has caused drastic changes in family housing conditions, has caused a decrease in the number of marriages, and has caused an altered outlook on life. A step toward the working out of a new home and family life will be taken when men and women realize their mutual economic uncertainties and needs.—*C. C. Neet* (Clark).

1032. Frede, L. The educational system in the penal institutions of Thuringia. *Proc. First Int. Cong. on Ment. Hygiene*, 1932, 2, 406-514.—A description of the way in which the progressive system of penal administration, which aims at "gradually loosening penal restraint and facilitating the step from prison confinement to a life of liberty" has been elaborated to further this aim.—*B. Casper* (Clark).

1033. Furtmüller, C. Iphigenie auf Tauris. (Iphigenia on Tauris.) *Int. Zsch. f. Indiv.-psychol.*, 1932, 10, 328-339.—The article presents a psychological analysis of Goethe's drama in individual-psychological terms which will appeal to many students because of the consistent applicability of its tenets. Furtmüller shows that Goethe here presents two of his favorite themes. One is the problem of equal rights of women with men for creative activity and recognition in the same fields. Further, the problem of the real worth, the basic motives in life, is also treated. True humanity is achieved when individuals, as does Iphigenia, learn to trust their fellow men, treat them honestly and with fairness, and show unselfish devotion even at the cost of all held dear.—*O. N. de Weerdt* (Beloit).

1034. Glueck, S. Individualization and the use of predictive devices. *J. Crim. Law & Crimin.*, 1932, 23, 67-76.—*(Soc. Sci. Abst. IV: 15733)*.

1035. Goodsell, W. The American family in the nineteenth century. *Ann. Amer. Acad. Pol. & Soc. Sci.*, 1932, 160, 13-22.—In the beginning of the nineteenth century the family was a closely knit institution. Headed by the father, it was the unit of society, as the family had been since the beginnings of civilization. However, as the century progressed, social movements and economic conditions resulted which slowly but surely destroyed the complete unity of the family. The most important of such forces were the spread of democratic ideas to social orders, the rapid development of a new industrial order, and the extension of the western frontiers. In the early and middle nineteenth century married women were in a state of complete subordination, and it was not until the second decade of the 20th century that women's rights were equal to those of men.—*C. C. Neet* (Clark).

1036. Grau, R. Die Gruppenehe ein völkerkundliches Problem. (Group marriage as an ethnological problem.) *Studien z. Völkerkunde*, 1931, 5, 152.—*(Soc. Sci. Abst. IV: 14311)*.

1037. Haberlandt, A. Volkscharakter und Rassenspsychologie. (Group characteristics and race psychology.) *Wien. Zsch. f. Volksk.*, 1931, 36, 57-65.—*(Soc. Sci. Abst. IV: 13981)*.

1038. Hall, F. S. Marriage and the law. *Ann. Amer. Acad. Pol. & Soc. Sci.*, 1932, 160, 110-115.—The author presents the status and general requirements of our present marriage laws. It is pointed out that although commonly viewed as one, marriage and divorce legislation should have entirely different viewpoints. Due to a confused viewpoint and to divided public opinion present marriage laws are much less stringent than divorce laws, so that at best the state can do little to make marriage a socially

beneficent institution. The solution of the marriage law problem is to be looked for in social education.—*C. C. Neet* (Clark).

1039. Harris, A. J., Remmers, H. H., & Ellison, G. E. The relation between liberal and conservative attitudes in college students, and other factors. *J. Soc. Psychol.*, 1932, 3, 320-336.—As an index of liberalism the Harper "Social Study" was given to 307 college sophomores, together with a questionnaire covering possible constituent or causal factors. The liberal student was found to be slightly more intelligent, to be more often a man than woman, to be less religious, to attend church less regularly, to have more probably no church preference, to have lost his faith in religion to some extent, to differ with his parents politically unless these parents are themselves independent, to believe in evolution, and to have more probably had some training in sociology or similar school subjects. No differences were found between the major political parties or the various religious denominations, nor was any relation evident between liberalism and father's occupation, size of home community, or degree of self-support.—*E. B. Newman* (Harvard).

1040. Herren, R. Y. The relation of stuttering and alcohol to certain tremor rates. *J. Exper. Psychol.*, 1932, 15, 87-96.—Rate and amplitude of the tremor in 13 male stutterers were recorded by means of a phonelescope. In all cases but one the amplitude of tremors of a rate of 8 to 12 per second is significantly decreased during stuttering. Alcohol decreases and in some cases depresses amplitude of tremors and introduces new tremor rates. Voluntary movement produces a greater percentage of tremors of the rates from 40 to 75 per second in stutterers than in normal speakers. This tremor rate is more pronounced during stuttering than during silence or free speech.—*S. Renshaw* (Ohio State).

1041. Hoffer, H., & De Parell, G. La lecture sur les lèvres chez les sourds. (Lip-reading by the deaf.) Paris: 1932.—The French are now incorporating lip-reading into their educational programs for deaf mutes and the hard of hearing. The author illustrates his scheme of instruction in "labiology" with a series of pictures, beginning with the easiest words and gradually increasing in difficulty.—*M. E. Morse* (Hyattsville, Md.).

1042. Hoffner, M. Kriminalität und Schule. (Delinquency and the school.) *Krim. Abhandl.*, 1932, No. 17. Pp. 39.—(Soc. Sci. Abst. IV: 15743).

1043. Holman, C. T. The cure of souls; a socio-psychological approach. Chicago: Univ. of Chicago Press, 1932. Pp. 346. \$2.50.—(Not seen).

1044. Jones, V. Relation of economic depression to delinquency, crime, and drunkenness in Massachusetts. *J. Soc. Psychol.*, 1932, 3, 259-282.—Evidence is presented to show the approximate inverse relationship between employment (as reflected by number of wage earners) and arrests for crimes against property for the twelve-year period 1920-31. Indices of arrests for violations of motor vehicle and liquor laws show fluctuations indicating the operation of uncontrolled factors, such as changed traffic con-

ditions or altered public opinion. Evidence for the influence of economic factors is therefore lacking here. No data are presented for crimes against the person. In spite of the fact that the major portion of juvenile delinquency consists of crimes against property, the number of cases begun in municipal and district courts against minors did not increase in the depression years 1930 and 1931.—*E. B. Newman* (Harvard).

1045. Kidd, A. M. The causes of crime. *Amer. Bar Asso. J.*, 1932, 18, 263-264.—(Soc. Sci. Abst. IV: 14080).

1046. Kirkpatrick, C. Techniques of marital adjustment. *Ann. Amer. Acad. Pol. & Soc. Sci.*, 1932, 160, 178-183.—A discussion of the techniques possible in bringing about marital reconciliations. The author maintains that sufficient scientific knowledge is not available to enable a complete understanding of the control of marriage adjustments, while the establishment of an objective criterion of success in marriage is one of the outstanding difficulties confronting the student of the family. The general technique consists in harmonizing the cultures and personalities of the marriage participants. Competent pre-marital advice is one of the most fruitful procedures, while in the last analysis, "the adviser must limit his function to revealing persons to themselves and to each other."—*C. C. Neet* (Clark).

1047. Koyama, Y. The mobility of occupations. *Res. Bull. Takaoka Comm. College*, 1931, No. 3, 203-243.—The writer attempts to survey the vertical mobility of the population constituting social strata, taking occupations as standards. It is necessary to ascertain beforehand the tendency and situation of the horizontal mobility of population, i.e., occupational mobility. The hereditary situations of individual occupations on the basis of statements taken from the students of the Takaoka Commercial College are used. Three investigations into the hereditary occupational situations of both successors and branch families since the time of their grandfathers down to the present, among (1) the third year students, (2) the second year students, and (3) the first year students respectively were made. The results of the investigations have revealed that the percentage of hereditary occupation for successors, which is 71.4 to 77.8 in the time of grandfathers, drops to 59.5 to 39.3 in the time of fathers. Further, the writer has taken occupational population statistics since the time of great-grandfathers down to the present time from each of the above-mentioned (1) (2) and (3) investigations and has demonstrated that hereditary occupations are gradually decreasing.—(Soc. Sci. Abst. IV: 14004).

1048. Lány, E. Sociální složky zločinosti a sociální zřetele ve výkonu trestu. (Social elements in criminality and social aspects of punishment.) *Sociální Rev.*, 1930, 11, 1-18.—(Soc. Sci. Abst. IV: 15744).

1049. Lichtenberger, J. P. Divorce legislation. *Ann. Amer. Acad. Pol. & Soc. Sci.*, 1932, 160, 116-123.—Divorce legislation has the function of regularizing society and of safeguarding the rights of

persons and property when marriages have broken down. When indirectly applied to the improvement of marital and impinging social and economic conditions, it can do much to forestall family disorganization and subsequent divorce. When applied directly to the control or diminution of divorces after marriages have been destroyed, its effects are practically negligible, and if too stringent and too rigidly enforced, it may easily create greater ills than it cures.—*C. C. Neet* (Clark).

1050. Loveland, F., Jr. Place of science in treatment of criminals and in prevention of crime. *New England J. Med.*, 1931, 205, 1190-1195.—(Soc. Sci. Abst. IV: 14082).

1051. Luzzatto, G. L. 10 dialoghi su la creazione artistica. (Ten dialogues on artistic creativity.) Lanciano: 1932. Pp. 230. Lire 9.00.—In these dialogues the author reveals his theory of artistic creation as deriving from a moment of fantasy life, from which proceed realization and execution. What the author calls "the fantasy movement" consists principally of a simplification of reality, in the active enjoyment of a natural spectacle or a manifestation of human life. This moment is not specifically an attribute of artists, but belongs to all who possess a spontaneous sensibility; the comprehension of an artist's work derives from accepting the simplification of reality which he gives us. The second moment of creation is typical of the artist; it is the moment when the simplification is transformed into communicable form. The third moment is that of execution. Criticism consists simply of repeating creation; it is essential that a critic be able to distinguish the creative moment of a work of art, and from there proceed to the process of expression. This is possible only if he has the sympathy by which a critic is able to follow an artist in his essential emotion. In criticism, as well as in creation, it is necessary to distinguish three moments: that of the first impression; that of direct analysis of the work, and that of synthetic interpretation. In the secondary dialogues the author expounds his theories (1) of imitative artists; (2) of translation and interpretation (in the sense of reading, execution, etc.) which exacts a form of comprehension antithetic to that of criticism, and a complete submission to the work (the interpreter continues the work of the creator in the platonic sense); (3) of particular forms of art, such as oration, essays, etc., and (4) of the architectural principles of works of art.—*R. Calabresi* (Rome).

1052. Lynd, R. S. Family members as consumers. *Ann. Amer. Acad. Pol. & Soc. Sci.*, 1932, 160, 86-93.—Since the industrial revolution the family has changed from a producing to a consuming unit, and as a part of the family unit each individual of the family is a consuming unit with individual needs. Buying by the members of a family is influenced by various factors. Chief among these are advertising, unequal distribution of wealth, increased possibilities of credit buying, changing needs, and higher standards of living. Impulsive buying rather than the use of judgment is the general trend.—*C. C. Neet* (Clark).

1053. Mead, M. Contrasts and comparisons from primitive society. *Ann. Amer. Acad. Pol. & Soc. Sci.*, 1932, 160, 23-28.—A discussion of the organization and function of the primitive family. It is shown that the family, commonly considered to consist of the husband, wife, and minor children, has not everywhere been the foundation of society. Furthermore it is shown that the primitive family assures its children greater security than the family organized about the marriage bond.—*C. C. Neet* (Clark).

1054. Meano, C. La fisiologia della voce cantata. (The physiology of the singing voice.) Turin: Paravia, 1931. Pp. 182. Lire 12.50.—Description of the functions of the vocal organs and respiratory apparatus, phonation, and resonance. The author discusses the production of the voice, its limitations, registers, and control.—*R. Calabresi* (Rome).

1055. Mendoza, S. Las recientes tendencias del procedimiento en lo criminal en Méjico. (Recent tendencies in Mexican criminal procedure.) *Rev. de crim. psiquiat. y med. leg.*, 1931, 18, 75-83.—The new Mexican penal code abolishes the death penalty, substitutes the term "sanctions" for "punishments," replaces the jury by a judge assisted by a commission expert in sociology, psychiatry and related sciences.—(Soc. Sci. Abst. IV: 13809).

1056. Miller, N. The European heritage of the American family. *Ann. Amer. Acad. Pol. & Soc. Sci.*, 1932, 160, 1-6.—A discussion of the European background of the American family. The following topics which have been of importance in shaping the present American family are discussed: woman's place in medieval Europe, factors influencing American settlers, race amalgamation, and family patterns of Poles and Slavs.—*C. C. Neet* (Clark).

1057. Miner, J. R. Do the churches prevent crime? *Amer. Mercury*, 1932, 25, 79-81.—(Soc. Sci. Abst. IV: 15746).

1058. Mira y López, E. Manual de psicología jurídica. (Manual of juridical psychology.) Barcelona: Salvat Editores, 1932. Pp. 270.—The author is a former professor of Ohio University and is now president of the Psychotechnical Institute of Barcelona, Spain. The book is an exposition of psychological knowledge, data and methods applied to jurisprudence. The main contribution of psychology to law is along the lines of (1) the examination of testimony, (2) the detection of evidences of guilt, (3) the discovery of the psychological motivation of transgression, (4) the juridical valuation of the different types of personality, and (5) the therapeutic and prophylactic value of mental hygiene. Human personality must be conceived, studied and treated as a unit. Human behavior depends on certain hereditary, acquired or mixed factors, such as physical constitution, temperament, intelligence, character, previous experience of analogous situations, the "constellation" or influence of the immediate antecedent experience, the actual external situation, the average type of the collective or social reaction, and the subjective perception of the situation. According to psychology

transgression "is a terminal objective reaction of a mass of forces which have been in continuous conflict since our birth." The primary motives of transgression are the instincts of self-preservation and preservation of the species. We all would be transgressors but for the internal control of education and the external bridle of punishment. The only scientific treatment of transgression is on the basis of individualization. The central problem in jurisprudence is not only to find out the nature of a given transgression but especially to discover objective evidences of the part played by the indicted, and to reconstruct the facts with the maximum of truth and objectivity. This procedure requires (1) a comprehensive, clear and carefully prepared set of questions, (2) an exact record of the answers, and (3) means of testing the sincerity and truthfulness of the indicted. Several tests for this purpose are summarized. Testimony, as it is now usual in court practices, is rather a nuisance. A person's testimony about a certain happening depends on (1) how it was perceived, (2) how the record was kept in the mind, (3) how able the individual is to recall it, (4) how he wants to express it, and (5) how able he is to express it. The main influences that affect testimony are habit, suggestion, chronological confusion, psychic type, sex and age. A full chapter is devoted to the analytical study of psychopathic personalities, means of recognizing them, and their juridical importance and valuation. Normal personality contains "in germ" all the tendencies of reaction which lead to the different types of abnormal personality. Every mental defective is an individual with increased potentiality for transgression. In testamentary jurisprudence there is a great need of a careful psychological exploration of the testator's mind. It is not enough to know that a person really wants to bequeath; it is necessary to investigate whether this desire or volition is determined by normal psychic motives, and to protect the testator against self-deception or deception by others. The book closes with a chapter on mental hygiene. "The real objective of a science of jurisprudence, if some day it becomes a science, must be to avoid delinquency, much more than to merely judge and correct it." Since transgression exists in a potential state in all normal individuals, any collective prophylaxis of delinquency must consist in the increasing of the capacity of inhibition of primitive tendencies of reaction and in the effort to make every person have an exact knowledge of one's social rights and duties, a clear understanding of the reason of such rights and duties, a deep conviction of the real superiority of social behavior and also a great fear of the consequences, more moral than physical, of misbehavior. Descriptions of several tests for the detection of potential delinquents are given in detail. Occasional delinquents should be treated in such a way as to prevent them from becoming habitual delinquents. In order to do this a psychobiological criterion must permeate all the laws and juridical procedures. Incurrigible recidivists should be considered as social invalids. Most of them are real

psychiatric cases of different denominations. They must be sterilized, isolated in a special section of the penal establishment and submitted to strict medical observation. There is no possibility of social freedom for such individuals.—*G. B. Camargo* (Mexico).

1059. More, G. V. D. Prognostic testing in music on the college level: an investigation carried on at the North Carolina College for Women. *J. Educ. Res.*, 1932, 26, 199-212.—The study attempts to answer two questions: (1) What battery of tests will be most effective in predicting the probable success of college freshmen who major in music? (2) With what degree of accuracy can a prognosis be made with this battery? Following an extended statement of the investigations in the literature, the author gives the materials of her own experiment. A total of fifteen tests were used; six tests of the Seashore battery, two by Kwalwasser, the Hutchison Silent Reading test, the Schoen test in relative pitch, and five tests devised by the author on aural and visual discrimination of pitch and time errors, and discrimination of voice movement. To these an intelligence test was added. The test results were compared with students' marks for the college year. A coefficient of multiple correlation of .73 was found between the college freshman marks in music courses and the four tests of the chosen battery, viz., More, *Aural and Visual Discrimination of Time Errors*; More, *Aural and Visual Discrimination of Pitch Errors*; Schoen, *Relative Pitch*; and More, *Voice Movement*.—*S. W. Fernberger* (Pennsylvania).

1060. Mowrer, E. R. Divorce and readjustment. *Ann. Amer. Acad. Pol. & Soc. Sci.*, 1932, 160, 191-196.—A discussion of the problems involved in the readjustment following divorce. An individual's reaction to divorce depends upon his conception of marriage. The general problems in readjustment are those pertaining to sex expression, emotional dependency, social relationships, remarriage and the disorganization of children. The fundamental problem in readjustment is that of personality development.—*C. C. Neet* (Clark).

1061. Parten, M. A statistical analysis of the modern family. *Ann. Amer. Acad. Pol. & Soc. Sci.*, 1932, 160, 29-37.—An analysis of the size of the modern family. The author concludes that statistical results on the size of the family will vary according to the definition of family adopted. According to the New Haven definition the number of persons in the modern family is about four. However, great variation is shown. Concerning the composition of families, the most prevalent type of family, which comprises about two-fifths of all families (in the city of New Haven) consists of a husband, a wife, and one or more children.—*C. C. Neet* (Clark).

1062. Posse, F. Die geistige Kultur der Eskimo und ihre Erforscher. (The non-material culture of the Eskimo and its investigator.) *Geog. Anz.*, 1932, 33, 75-81.—(Soc. Sci. Abst. IV: 14326).

1063. Riese, W., & Rothbarth, O. Falsche Beurteilung des Unfallneurotikers und ihre Rechtsfolgen. (False judgment of the traumatic neurotic and its

consequences for law.) *Ärzt. sachverständ. Ztg.*, 1932, 38, 157-159.—Unjustified doubt concerning the truth of what an injured person says may arouse a neurosis. Psychogenic results of such false judgment by physicians are themselves legally results of the trauma.—C. W. Fox (Rochester).

1064. Bartori, P. *Erbliche Familienkennzeichen im Volksglauben*. (Inherited family characteristics in popular beliefs.) *Volk u. Rasse*, 1932, 7, 106-110.—(Soc. Sci. Abst. IV: 14317).

1065. Sayre, F. B. How can an educator help to combat crime? *Rel. Educ.*, 1932, 27, 793-798.—Whether or not crime has substantially increased during recent years, Sayre thinks it is certain that our efforts to control it have met with failure. The difficulty is that our attempt to do so comes too late in the life of the criminal. Statistics show that criminal tendencies frequently appear as early as the eighth or ninth year. If these are not stopped then, a criminal character is likely to develop through the stages of truancy, police records, the juvenile court, probation and the reformatory, after which comes confirmed felony. Since parents cannot be relied upon to correct misbehavior, reliance must be placed upon the teacher to detect it, and when this becomes extreme the child should be removed to an institution where its training can be supervised by experts. For the most part, however, children can best be treated in their normal surroundings. Each community should maintain a well-paid committee of expert social workers, physicians, and psychiatrists. The delinquent child's home and surrounding influences should be investigated and treatment employed like that afforded by the child guidance clinics of large cities. It is the conviction of the author that the prevalence of crime is due to the decadence of religious teaching in the home, the school, and the church. Children should be brought into contact with the lives of noble men and especially with that of Christ.—J. P. Hylan (Stoneham, Mass.).

1066. Schiller, B. A quantitative analysis of marriage selection in a small group. *J. Soc. Psychol.*, 1932, 3, 297-319.—Additional data on the question of assortative mating, i.e., the attraction of similar or of opposing traits in the selection of a mate, are presented. A positive correlation was found for physical traits of age, height, weight, hair and eye color, and for the mental traits underlying associative reactions, arithmetic reasoning, vocabulary, general information, and social and political opinion. These results indicate homogamy, the mating of like persons. The results of temperamental and emotional tests show chance relationships. The author has attempted to improve over previous studies by the use of a small, quite homogeneous group of 48 couples, and in the use of a control group consisting of random matings of the test group.—E. B. Newman (Harvard).

1067. Schmidt, E. *Das Verbrechen als Ausdrucksform sozialer Entmutigung*. (Crime as a form of expression of social discouragement.) Munich: Schweitzer, 1931. Pp. 80. RM. 1.50.—The writer considers crime to be a product of de-

jection, of a neurotic attitude in Adler's sense. The neurotic criminal has a strong tendency toward aggression and perceives the environment as hostile. "Crimes are committed not because of free, creative resolution, but because of weakness." The present penal system is intentionally discouraging; we should seek to educate the criminal through the medium of confidence.—C. W. Fox (Rochester).

1068. Schwartz, L. A. Intra-family relationships and resulting trends. *Ann. Amer. Acad. Pol. & Soc. Sci.*, 1932, 160, 45-48.—The family is comparable to a living cell in which all the parts are interdependent. "It is within the family itself that the driving forces and the interplay of emotional reactions shape the attitude of the members one to another." The emotional values of the family are in such a fine balance that over-emphasis of these values on the part of any member of the family will cause compensatory satisfaction reactions on the part of the other members. Such compensations may exist reciprocally between parents and children and also between the children. They may be harmful or beneficial.—C. C. Neet (Clark).

1069. Solomon, M. Modern psychiatry and criminology. *Illinois Med. J.*, 1931, 60, 429-435.—(Soc. Sci. Abst. IV: 14084).

1070. Stokowski, L. New horizons in music. *J. Acous. Soc. Amer.*, 1932, 4, 11-19.—An address delivered before the New York meeting of the Acoustical Society in which the speaker outlines new possibilities in music due to the advance of acoustical knowledge, and in which he appeals for closer co-operation among physicists, musicians, and psychologists for the solution of interrelated problems.—P. E. Huston (Worcester State Hospital).

1071. Sutherland, E. H. The prison as a criminological laboratory. *Ann. Amer. Acad. Pol. & Soc. Sci.*, 1931, 157, 131-136.—(Soc. Sci. Abst. IV: 14107).

1072. Terhune, W. B. Marital maladjustments. *Yale J. Biol. & Med.*, 1931, 4, 149-165.—(Soc. Sci. Abst. IV: 14002).

1073. Trout, D. M. Religious experience in relation to religious behavior. *Rel. Educ.*, 1932, 27, 804-810.—This article presents the behavioristic attitude toward religious education. Following the analogy of the Lange-James theory that emotion depends upon bodily reaction and is a by-product of essential processes, religious experience is found to be relatively valueless for practical training. In the past the insistence upon belief, sense of sin, and the feeling of forgiveness has served only to distract attention from the real factors that condition desirable conduct. They are indices of intra-organic behavior and disorders and of interest to the psychiatrist; but while they represent valued religious concepts they must give way to more wholesome and efficient means, such as Boy and Girl Scouts, Y. M. C. A. programs, school curricula, and other agencies.—J. P. Hylan (Stoneham, Mass.).

1074. Vowinkel, E. Ein Fall von krankhaft bedingten Konfessionswechsel. (A case of morbidly conditioned conversion.) *Zsch. f. Religions-*

psychol., 1932, 3, 97-111.—After her conversion to the Catholic church, a previously Protestant woman felt that she was not redeemed but was on the contrary rejected by God. The psychiatrist investigated the motives and recognized as the cause of the conversion a strong father-longing and a defiant antagonism to the mother in consequence of an unfortunate youthful experience. A compulsion appeared during later religious concentration in which the conflict of the patient had an unconscious share. An inclination to imitate the masculine independence which the unfaithful father had shown toward the mother showed itself in the withdrawal from the mother's church. Vowinkel contends that while the conversion might be a matter of desiring a good life, it is more likely to be a consequence of some impulsive striving. The case itself is shown by the author to be one of pathological religiosity; in later stages illusions appeared.—A. Römer (Gautzsch bei Leipzig).

1075. Watson, A. E. The reorganization of household work. *Ann. Amer. Acad. Pol. & Soc. Sci.*, 1932, 160, 165-177.—The author presents the thesis that household work should be reorganized and stabilized so that sound business principles may be applied. This standardization will promote family unity and will bring about better adjustments in relationships between employers and employees in the home.—C. Neet (Clark).

1076. Wolfe, S. M. Is the criminal wholly to blame? *So. Atlantic Quar.*, 1932, 31, 4-14.—(Soc. Sci. Abst. IV: 15750).

1077. Young, K., & Dedrick, C. L. Variation in the duration of marriages which end in divorce with special reference to the state of Wisconsin. *J. Amer. Statis. Assn.*, 1932, 27, 160-167.—From the U. S. Census, and from the State of Wisconsin Bureau of Vital Statistics, it was found that the average period between marriage and separation has increased during the last thirty years from 7.7 to 8.1 years, while the average period between marriage and divorce has decreased from 10.4 to 9.8 years. This is probably because divorce is more openly approved and the amount of divorce is increasing among older as well as younger married persons.—E. B. Greene (Michigan).

[See also abstracts 817, 819, 889, 903, 906, 910, 912, 926, 939, 940, 1089, 1090, 1097, 1106, 1114, 1116, 1132, 1138, 1143, 1155, 1158, 1179.]

INDUSTRIAL AND PERSONNEL PROBLEMS

1078. [Anon.] Der Psychotechniker als Gutachter bei Verkehrsunfällen. (The psychotechnician as evidential witness in traffic accidents.) *Indus. Psychotechn.*, 1932, 9, 223-224.—Since many different psychological factors, such as disturbances in perception of space, fears, etc., may be a direct or indirect cause for traffic accidents, it was decided by the federal court of Germany henceforth to require that in every automobile accident a psychotechnician, in addition to a physician, investigate the case.—C. Burri (Chicago).

1079. Bramesfeld, E., & Jung, H. Unfallverursachende Dämmerzustände bei Fahrzeugführern.

(States of drowsiness causing accidents in automobile driving.) *Indus. Psychotechn.*, 1932, 9, 193-210.—This investigation studied the problem of dozing during automobile driving, to learn whether the phenomenon so frequently reported by drivers has relatively general occurrence. An inquiry of a group of drivers, and an experimental investigation in which 74 subjects underwent a two-hour test in which, with a stencil, they had to trace a path on a moving band under various monotonous conditions, showed that drowsiness may be caused by many different factors; in fact, almost any monotonous occurrence of stimulation may put a driver to sleep or rather into a semi-hypnotic state. Any means which brings variety in stimulation, whether it be change in scenery, temperature, air current, position of the driver's body, etc., will aid in preventing drowsiness. Frequently if the driver engages in some additional activity while driving, such as singing, whistling or talking, or taking new roads, he can learn to keep awake.—C. Burri (Chicago).

1080. Fineman, A. Depression and the personnel department. *Person. J.*, 1932, 11, 211-215.—Economic depression has had a profound effect on personnel procedure in department stores. This has worked chiefly through two forces: the changed character of labor supply, and the changed internal structure of organizations. The results are described. Three fundamentals for successful action on the part of personnel departments are suggested: (1) a sense of obligation to cooperate with management to operate as effectively, productively, and economically as possible; (2) an abiding awareness of the broader implications of responsibilities in the social structure; (3) recognition of the immensity and uniqueness of the present opportunity to make a great record for personnel work.—(Courtesy *Person. J.*).

1081. Gutstein, G. Zur Frage des Arbeitstypus. (The problem of work types.) *Indus. Psychotechn.*, 1932, 9, 210-218.—This is essentially a critique of work types. In order to obtain experimental evidence for or against the existence of a general work type the author gave to 24 subjects ten different problems, consisting of three different kinds of formative material, such as paper, wire, and clay. For each material the tests were designed to measure quality of performance in copying more or less difficult patterns. In addition a hand-coordination test, a Bourdon, an addition, and a completion test were also administered. The measurements obtained from these tests were compared (1) to find the relation between method of work and material; (2) to find the relation between method of work and kind of work; and finally (3) to see whether there exists for a given individual one definite trend of method or quality of work which would justify the assumption of "work types." The intercorrelations of the measures of speed of work and the kind of work, as well as those of the quality and kind of work, were low, so that it could not be assumed that the amount or quality of work a subject produces in one situation would be an index of the quality or amount of work in another situation. Gutstein concludes that his data

showed little evidence either for or against general work types.—*C. Burri* (Chicago).

1082. Heilandt, A. Neue Wege zur Einführung in den Beruf. (A new method of vocational selection.) *Psychotechn. Zsch.*, 1932, 7, 93-96.—During these years of the depression many industrial concerns are able to employ only a few of the apprentice applicants who have successfully passed the qualifying examination. In order to prevent these unemployed people from remaining idle, and in order to offer them an opportunity to learn some trade, the AEG industry admits them to its shops, where they may receive instruction and training in the various aspects of the industry. These people work without pay and without apprentice contract, merely for the sake of experience. If they appear successful in their work, or if they show an aptitude for some particular branch of the business, they may receive special training along those lines, which may or may not end in a permanent job.—*C. Burri* (Chicago).

1083. Köhler, O. Massstäbe der Unfallstatistik. (Measures of accident statistics.) *Indus. Psychotechn.*, 1932, 9, 219-223.—Any statistical treatment of accidents must use a method that presents the data in such a way that they show the results of measures of accident prevention. Merely to note the frequency of accidents is not sufficient. The results must be expressed in terms of the amount of the worker's time lost and of the severity of the accident.—*C. Burri* (Chicago).

1084. Krieg, H. Zur Psychologie des Hetzens und Bremsens, ein Beitrag zur Analyse des Arbeitstemos bei Griffarbeit zum Zweck wissenschaftlicher Vertiefung des Zeitnehmens. (On the psychology of racing and restraining; a contribution to the analysis of work tempo in hand work, with the aim of scientifically reducing the time consumed.) Munich: Oldenbourg, 1932. Pp. 14.—See VII: 289.—*R. R. Willoughby* (Clark).

1085. Mayer, T., & Sterzinger, O. Zur Berufseignung des Schuhmachers. (On aptitude testing for shoemakers.) *Psychotechn. Zsch.*, 1932, 7, 113-117.—The authors show that the criticism made by Zirn in the June 1931 issue of this journal regarding some existing aptitude tests for shoemakers also holds true for his own tests. Zirn believes that many of the existing tests overlap, thus measuring the same thing, while other abilities essential for the trade are not tested. In an investigation in which Zirn's tests were used the authors found that seven out of his battery of tests gave intercorrelations of .90. These high correlations are interpreted to mean that all these tests measure the same ability, thus having the very weakness which Zirn tried to overcome.—*C. Burri* (Chicago).

1086. McMurry, R. N. Efficiency, work-satisfaction and neurotic tendency. A study of bank employees. *Person. J.*, 1932, 11, 201-210.—196 employees of the Harris Trust and Savings Bank of Chicago were given the Bernreuter Personality Inventory, scored for "neurotic tendency," the Otis Higher Examination, Form B, and a special work-attitude questionnaire designed to quantify the sub-

ject's attitude toward his specific job. The groups consisted of 93 women, 40 page girls, and 63 men. The Bernreuter scores correlate only slightly with ratings on efficiency; such correlations as do appear are in the direction of a relationship between neurotic tendency and lowered efficiency. They also bear a slight but consistent relationship to work attitudes. Those whose scores fall into the most neurotic quarter of the distribution have a slight tendency toward dissatisfaction with and maladjustment to their jobs. Correlations between Otis test scores and ratings on efficiency were found ranging from .34 to .57. When Otis and Bernreuter tests are used jointly in the discrimination between the efficient and the inefficient the Bernreuter test does not contribute enough to justify its use as a supplement, and the author suggests that there has been too much emphasis on the significance of neurotic tendency in accounting for work maladjustment, inefficiency and unrest.—*J. C. Spence* (Clark).

1087. Stockton, F. T. Personnel management in the collegiate business school. *Person. J.*, 1932, 11, 220-226.—Most of the personnel management texts issued in 1931 suffer from the same lack of balance found in their forerunners. Certain important topics are ignored or minimized. Little fundamental theory is given. Personnel management still plays a subordinate rôle as a field of instruction in collegiate schools of business. Instructors with a new type of training must be developed. A tie-up between labor economics and personnel management is needed. Schools of business should give more attention to research in the personnel field. There are reasons for believing that the study of personnel management will become of increasing importance in collegiate business schools. At present, however, special personnel curricula seem unwise.—(Courtesy *Person. J.*).

1088. Toops, H. A. Sifting civil service applicants by the successive hurdles method. *Person. J.*, 1932, 11, 216-219.—When the supply of trained applicants greatly exceeds the demand, it is possible to select a very superior working force. But depressions cut the budgets for examining, with the result that when 200 applicants apply for a half-dozen jobs, as in the civil service, there is a temptation to use the successive hurdles method of selection. The author points out the dangers of this method unless the successive examinations are arranged in order of decreasing validity.—(Courtesy *Person. J.*).

[See also abstracts 807, 943, 957, 981, 1047, 1105, 1172.]

CHILDHOOD AND ADOLESCENCE

1089. Aichhorn, A. Verwahrloste Jugend. Die Psychoanalyse in der Fürsorge-erziehung. (Delinquent youth. Psychoanalysis in correctional education.) (2nd ed.) Vienna: Int. Psychoanal. Verlag, 1931. Pp. 191. M. 6.—Freud's introduction to this book emphasizes that the educator must have psychoanalytic teaching, since otherwise "the child will remain for him an insoluble puzzle." At the same time, however, he must remember that education is something *sui generis*, which is not to be confused

with or replaced by psychoanalytic influence. This book of Aichhorn's is an example of the way in which psychoanalytic instruction (and similarly other psychotherapeutic measures) may be combined with the specifically educational viewpoint without prejudice to either. The author's experience both as an analyst and as an educator enables him to give vivid first-hand descriptions of child personalities and to translate his impressions into the language of the school. A specific feature of the book lies in the descriptions of individual children and the individualized attitude of the educator toward them.—*M. E. Morse* (Hyattsville, Md.).

1090. Brinker, D., & Fenton, N. The visiting child guidance clinic of the California Bureau of Juvenile Research. Manual for community workers. *Calif. Bur. Juv. Res. Bull.*, 1931, No. 5. Pp. 12.—Part I of this bulletin takes up the preliminary preparation for the visiting clinic, answering such questions as how to obtain clinic service, community organization of the clinic, publicity, preparation of parents and children for the clinic, selection of cases, preparation of material, and the problems of equipment and schedules. Part II is concerned with the clinic at work in the community. Part III presents the follow-up work of the clinic after leaving the community as an essential part of the program.—*P. Seckler* (Clark).

1091. Brinker, D., & Fenton, N. Social history guide. *Calif. Bur. Juv. Res. Bull.*, 1932, No. 7. Pp. 16.—Pointing out that the social history of a child is the keystone of the clinic study, the authors present a social history outline and a sample social history. Descriptions of the attitudes of other persons toward the child and what these persons believe to be the attitudes of the child toward them are emphasized as the most fundamental facts sought by the social worker in the child guidance clinic. Problems confronting the worker securing the history and suggestions for meeting them are presented.—*P. Seckler* (Clark).

1092. Catel, W. Ueber die Hirntätigkeit des Neugeborenen. (The brain activity of the newborn.) *Dtsch. med. Woch.*, 1932, 58, 907-1002.—The fundamental questions dealt with are whether the cerebrum, the phylogenetically youngest part of the central nervous system, is operative in the newborn child; and if not, whether peculiarities in brain physiology such as are found in lower animals can be demonstrated. Until about the fourth month after birth, the human infant resembles a brainless reflex animal. The tonic hand reflex, the grasping reflex, the oral mechanism, and the sucking reflex are movements parallel to phylogenetically old forms of behavior. Certain primitive expressive movements belong in the same rubric. As a creature without an active cerebrum, the newborn infant is incomplete and helpless and must live in closest physiological relationship with the mother.—*C. W. Fox* (Rochester).

1093. Chadwick, M. The neurotic child. *Proc. First Int. Cong. on Ment. Hygiene*, 1932, 2, 447-465.—A psychoanalytical treatment of the subject of the neurotic child. The causes of children's neuroses are classified under four main headings: (1) infantile

impulses seeking gratification in conflict with repressions; (2) the child in conflict with infantile impulses; (3) the child's ego in alliance with infantile impulses in open conflict with parents, society, and environment; (4) the child in conflict with reality. Clinical pictures of neuroses resulting from these causes and methods of treatment are presented.—*B. Casper* (Clark).

1094. Crothers, B. Mental hygiene problems of children with sensory-motor defects. *Proc. First Int. Cong. on Ment. Hygiene*, 1932, 2, 475-487.—There is need for adequate diagnosis to determine the "residual assets" as well as the "defect liability" of children with organic defects of the central nervous system, so that an educational program which stresses these assets may be planned for each child. The Children's Hospital in Boston is engaged in work in this field.—*B. Casper* (Clark).

1095. Dennis, W. Discussion: The rôle of mass activity in the development of infant behavior. *Psychol. Rev.*, 1932, 39, 593-595.—Irwin's theory that mass activity is the prototype of infant behavior is criticized, on the ground that it is not the only type of response in newborn infants, nor the first fetal response, and it has not been shown how reflexes can be individuated out of this mass activity when they obviously form no part of it.—*A. G. Bills* (Chicago).

1096. Fenton, N. The school training and guidance of the child who is different. *Calif. Bur. Juv. Res. Bull.*, 1931, No. 6. Pp. 9.—This bulletin presents a description of a consultant service available for such communities as wish to confer with specialists regarding their program of care and training for children who are different either mentally or physically. The author points out the social and economic significance of exceptional children as well as the dangers of unscientific methods of segregation in the school, and offers a list of problems and questions which must be investigated before launching a special class for children who differ markedly from their fellows.—*P. Seckler* (Clark).

1097. Fenton, N. The organization and purposes of the visiting child guidance clinics of the State Department of Institutions. *Calif. Bur. Juv. Res. Bull.*, 1932, No. 8. Pp. 10.—The purpose of the visiting child guidance clinics is to offer the advice and guidance of specialists in the field of the problem child to the smaller communities in the state in the hope that by careful and individual study and timely guidance many so-called problem children may be prevented from ever entering the juvenile courts or the state institutions. Social, educational, medical, and psychological examinations will be included in the program. The social, economic, and educational values of the clinic are evaluated. Its routine work, types of children studied, and the practical problems confronting such an agency are described.—*P. Seckler* (Clark).

1098. Ferrari, G. C. Mental hygiene and the high school. *Proc. First Int. Cong. on Ment. Hygiene*, 1932, 2, 95-106.—An outline of the psychological crises occurring during adolescence, and a discussion

of the difficulties of dealing with these.—*B. Casper* (Clark).

1099. Garrison, K. C. The relative influence of intelligence and socio-cultural status upon the information possessed by first-grade children. *J. Soc. Psychol.*, 1932, 3, 362-367.—The dependence of scores on the Sangren Information Tests for Young Children on Intelligence as measured by the Goodenough Drawing Scale, and on socio-cultural status as determined by a questionnaire, is reported in this study. When sex, age, and mental age were controlled by the selection of 38 pairs of subjects equated in these respects, a difference of 22.7 points on the Sangren scale was found between the superior and inferior groups, equal to 3.94 points per P. E. unit of the socio-cultural scale. With sex, age, and socio-cultural status equated for 33 pairs of subjects, a difference of only 10.6 points on the Sangren scale was found, equal to 1.44 points per P. E. unit of the intelligence scale. Thus information appears to be more dependent on socio-cultural status than intelligence under the conditions of this experiment.—*E. B. Newman* (Harvard).

1100. Gruenberg, S. M. The significance of the home in the personality and character development of the adolescent. *Proc. First Int. Cong. on Ment. Hygiene*, 1932, 2, 151-176.—During puberty widespread personality and character changes take place which involve new personal and social adjustments. The importance of the influence of the family and home upon the personality development of the adolescent is stressed. Parents should be educated by experts in methods of child training.—*B. Casper* (Clark).

1101. Herlitz, C. W. Några ord om skol- och skolbarnshygien samt om Svenska Skolläkareföreningens arbete för enhetlighet i den svenska, skolhygieniska verksamheten. (Some comments on the hygiene of the school and the school child and on the attempt of the Swedish Society of School Physicians toward establishing uniformity in the Swedish school hygiene work.) *Svenska läkart.*, 1932, 29, 1116-1123.—The article discusses in the main a complete program of school hygiene, with special reference to rural schools, as offered by the Swedish Society of School Physicians. There has been much discussion of late in Swedish medical circles about the importance of height and weight measurements of school children. The new program tries to take a balanced point of view in this matter. It includes such measurements (and even makes provision for a central bureau for the statistical treatment of the data gathered) but regards them as only one out of many of the important clinical devices to be used. The program contemplates the cooperation of school physicians and teachers, as well as of all existing social agencies. For example, in the case of "nervous school children" an investigation also of the child's home environment is held to be indispensable.—*M. L. Reymert* (Mooseheart Laboratory for Child Research).

1102. Hollingworth, L. S. The child of very superior intelligence as a special problem in social adjustment. *Proc. First Int. Cong. on Ment. Hy-*

giene, 1932, 2, 47-60.—A discussion of the more important problems which arise from a combination of immaturity (emotional) and superiority (mental) in the gifted child (with IQ of 190 or more). As the child grows older many of the problems automatically disappear. It is during childhood, when the problems of the gifted child are most difficult, that he is under the control of a guardian. The latter should know more of the nature and needs of the child than he does now.—*B. Casper* (Clark).

1103. Kenworthy, M. E. Social maladjustments (emotional) in the intellectually normal. *Proc. First Int. Cong. on Ment. Hygiene*, 1932, 2, 26-42.—The roots of many adult emotional maladjustments are found in childhood. The paper describes situations constantly arising in the young child's life, which because of unfortunate handling and inadequate understanding lead to emotional strain. Parents, teachers and all concerned with the training of the child are in need of education to lead the child to social and emotional maturity.—*B. Casper* (Clark).

1104. Levin, M. Auditory hallucinations in "non-psychotic" children. *Amer. J. Psychiat.*, 1932, 11, 1119-1152.—The paper reports a study of auditory hallucinations in the cases of four boys who were "not psychotic," at the time of the study, although two showed early schizophrenic signs. The functions apparently served by the hallucinations, i.e., self-esteem, instinctive craving for satisfaction, defense, repression of undesirable cravings, self-punishment, are discussed. The functions fulfilled are however considered "only one link in the chain of factors which really causes the hallucinations to occur." The author further considers the findings with reference to projection in general, and to eidetics. Bibliography.—*S. J. Beck* (Boston Psychopathic Hospital).

1105. Mathieu, J., & Poppelreuter, W. Über die Notwendigkeit psychotechnischer Eichung von Kinderspielzeugen. (The necessity of psychotechnical adjustment of toys.) *Psychotechn. Zsch.*, 1932, 7, 109-113.—At present most children's toys are built with little regard to their fitness for children. Frequently toys are too complicated and difficult to use. The author shows this by analyzing several mechanical toys and by showing how some apparently simple construction toys are so difficult to handle that several of his adult subjects, on whom he tried out these games, could not put the blocks together. Thus there is room here for scientific research. Children's toys and games should be tested out on children to make certain that they can be enjoyed by them. Children's toys should be for children and not for adults.—*C. Burri* (Chicago).

1106. Plant, J. S. The child as a member of the family. *Ann. Amer. Acad. Pol. & Soc. Sci.*, 1932, 160, 66-74.—A discussion of the value of the family in the formation of the child's personality and of the value to the family group derived from the child's presence. The family relations of value to the child are those relating to the child's status, his adjustment to "personal authority," his sexual adjustment, and adjustments toward his later married or family life. In turn the family exacts of the child "a cer-

tain compliance to the pattern of the group or the needs of the parent."—*C. C. Neet* (Clark).

1107. Rank, O. The development of the emotional life. *Proc. First Int. Cong. on Ment. Hygiene*, 1932, 2, 118-138.—In effect all education is a matter of training of the will of the individual so as to mold him into a socialized member of the group. "It may be said that the parents are the natural educators of the child's emotional life and that the teacher (in the school) is the educator appointed by the community for the systematic training of the child's understanding and intelligence." The educational ideology of modern psychologists seeks to restrict the child's early manifestations of will. However, for the proper development of the child's emotional life the educator (parent and teacher) must accept it as it develops from the child's own nature. The emotions cannot be educated. They can be influenced only by using the emotional life of the adult as an example. A free natural expression of emotion in the educator will most quickly stimulate such expression in the child. The complex relationships between the will, impulse and emotion are discussed.—*B. Casper* (Clark).

1108. Ruggles, A. H. Mental hygiene of the college student. *Proc. First Int. Cong. on Ment. Hygiene*, 1932, 2, 70-84.—A general discussion of methods employed in treating problem cases among college students.—*B. Casper* (Clark).

1109. Schairer, J. B. Das fröhreife Kind. (The early matured child.) *Int. Zsch. f. Indiv.-psychol.*, 1932, 10, 357-362.—Children showing early sex activities should not be classed as "early matured," since the term is inapplicable to the development of the emotional life, the intelligence, and the social reactions of the child. Conclusions from three detailed case studies of prematurely developed girls are presented: (1) Sex life should never be looked upon as a separable sphere of interests. Not sex satisfaction, but striving for affection and social recognition are the drives in the premature sex cases. (2) Parents should hold themselves responsible for the trends developed by their daughters in their strivings for recognition. (3) These strivings should be recognized and directed in early childhood. (4) The dangers and problems accompanying the present-day breakdown of family life in the modern cities require especial consideration for child welfare.—*O. N. de Weerdt* (Beloit).

1110. Staples, E. The responsiveness of infants to color. *J. Exper. Psychol.*, 1932, 15, 119-141.—By observing 262 infants ranging in age from 69 days to 24 months the experimenter found that subjects begin to perceive colors, at least to a certain degree, at the age of three months. The criterion of perception of color was the grasping or reaching reflex. Individual differences in color discrimination are most marked between the ages of six and twelve months. Girls are more responsive to color than boys.—*S. Renshaw* (Ohio State).

1111. Stevenson, G. S. The child guidance clinic—its aims, growth and methods. *Proc. First Int. Cong. on Ment. Hygiene*, 1932, 2, 251-275.—A child

guidance clinic is a specialized psychiatric clinic designed to diagnose and treat behavior and personality problems of children. It attempts to "correct mental deviations in their incipiency, to establish a mentally healthy milieu for the child, and to create among adults a general understanding of the needs of the child for healthy mental development." Following this statement of aims is given a history of the child guidance movement and a detailed description of methods and organization, and some of the problems encountered by these clinics.—*B. Casper* (Clark).

1112. Thom, D. Treatment of special problems in the pre-school period. *Proc. First Int. Cong. on Ment. Hygiene*, 1932, 2, 752-766.—A description of the work done by the Habit Clinic in Boston in the treatment of problem children of pre-school age.—*B. Casper* (Clark).

1113. Wexberg, E. *Sorgenkinder*. (Problem children.) Leipzig: Hirzel, 1932. Pp. 150. RM. 5.00; cloth, RM. 6.50.—A systematic study of problem children from the point of view of individual psychology. Part I contains the general principles of the Adlerian school: *The Five Factors of Environmental Influences*, (a) *The Bodily Constitution of the Child*, (b) *The Social and Economic Situation of the Child*, (c) *Sex*, (d) *The Family Constellation*, (e) *Education*. Part II, *Neurotic Types of Children*, (1a) *The Spoiled Child*, (b) *The Lying Child*, (c) *The Ambitious Child*, (d) *The Model Child*, (e) *The Bashful Child*, (f) *The Anxious Child*, (g) *The Lazy Child*, (h) *The Dull Child*, (2) *Childhood Faults*, (a) *Disturbances of Nutrition and Digestion*, (b) *Thumb-Sucking, Nail-Biting, Grimacing, Motor Restlessness*, (c) *Speech Defects*, (d) *Bed-Wetting, Uncleanliness*, (e) *Sexual Vices, Puberty*. Part III, *Education and Psychotherapeutic Pedagogy*. It is much more difficult to bring up children today than it was fifty years ago. Individual psychology issues from the root conviction that effective education is possible only if based on the understanding of the child's soul, and that such an understanding must emerge from the child's relation toward the environment, for humanity consists of the sum total of the community of living individuals. The aim of childhood education should be to promote the growing individual gradually into a stage where he is capable of ascertaining his place in society and of becoming a member of it. The physical preliminary conditions are fixed by his natural endowments and the condition of his health. The psychic conditions on the other hand are in a far superior degree determined by the child's experiences and by his reaction to them. In order, therefore, to understand children we must become acquainted with their experiences and reactions.—*E. Johns* (New York City).

1114. Whittaker, M. L. Adolescent religion in relation to mental hygiene. *Rel. Educ.*, 1932, 27, 811-817.—The author finds that the period of adolescence is one of much stress and strain. While there are not commonly experienced the extreme emotional upheavals that were formerly supposed to be present, there is a growth of the emotions found in the pre-adolescent period and also a development of emo-

tional control. Fears of death and other fears suggested by literature are common, and there are doubts especially with respect to religion. Love and other emotional states associated with sex are at this time especially difficult to manage, and are threatening to mental stability. There are differences of opinion as to the influence which religion has at this time. Some say that there is a striking lack of religion among girls, although just what constitutes religion is something of a question. Boys are likely to be critical and skeptical. Fears of sin and its consequences are common, but often fail to influence conduct. The tendency of religion at present is to create mental conflicts, whereas a guiding and dominating influence which would avoid them would contribute to tranquillity and mental health. It seems to be the general conviction that the teaching of religion will need to be changed in order to provide a wholesome and balancing outlook upon life such as will appeal to adolescents.—*J. P. Hylan* (Stoneham, Mass.).

1115. Yü, S. M. A preliminary study of the interests of elementary school children. (*Chinese*) *Educ. Rev.*, 1931, 23, No. 7, 41-46.—With the aim of improving the school discipline on the basis of the interests of the children, the First Experimental Elementary School, Shanghai, gave an "interest test" to the grade children. The following five questions may serve as an illustration of the test content: (1) What kind of work do you prefer most? (2) What school subject do you like most? (3) What kind of books do you read most? (4) In your leisure time, what kind of recreation do you enjoy most? (5) What kind of games do you play most? Under each question several items were mentioned, and the children were required to answer by underlining the proper items on the paper. For the children of and above Grade III, group examinations were given and the task of underlining was done by the children themselves; while for those in Grades I and II, the proctors asked questions individually and recorded the children's answers. It was found that under (1), the first choice was keeping animals and the last choice was gardening; under (2), arithmetic stood highest and English lowest; under (3), novels were most preferred and natural science study least preferred; under (4), the most popular recreation was visiting parks or suburbs and going to theaters; and under (5), a majority of the children liked to play ball or shuttlecock. With these data in hand, one may analyze and redirect the interests of these grade children, and formulate the disciplinary policy for the future.—*C.-F. Wu* (Nat. Res. Inst. Psychol., China).

1116. Zillig, M. Neue Untersuchungen zur Psychologie des dichterisch schaffenden Kindes. (New studies in the psychology of the poetically creative child.) *Zsch. f. Psychol.*, 1932, 126, 241-311.—This is a continuation of an earlier study (*Zsch. f. Psychol.*, 1929, 112) of Maja H., a poetically gifted child, 12 years of age at the time of publication. The study covers a period of 18 months, and special attention is devoted to her literary productions, her religious development, her school life, her family life, and her scores on numerous mental tests. It was

observed that she had accomplished the transition from childhood to adolescence without any real crises, that her development was in every respect balanced, rapid, and in general far more advanced than is normal for a child of her age. Her literary ability seemed to be the outcome of characteristics of the total personality rather than of the one-sided development of a few specific traits. Her achievements so far give promise of future literary or scientific productivity.—*R. B. MacLeod* (Cornell).

[See also abstracts 870, 927, 932, 965, 987, 983, 1008, 1121, 1132, 1156, 1180.]

EDUCATIONAL PSYCHOLOGY

1117. Barr, A. S. [Ed.] The journal of experimental education. Vol. I, No. 1, September 1932. (Quarterly.) Ann Arbor, Michigan: Edwards. \$5.00 a year. Price of single copies to vary from issue to issue, depending upon the size of the issue.—The first number of a new journal for technical workers interested in the experimental study of education. The materials published are limited to: (1) reports of experimental studies of the child, the curriculum, and methods of instruction; and (2) critical discussions and researches relating to the measurements, statistics, and methods of experimental research. The journal is reproduced by means of lithoprinting.—*H. W. Karn* (Clark).

1118. Bixler, R. W. Rating the college entrant. *J. Higher Educ.*, 1932, 3, 361-365.—Evidence of extreme variation, both in secondary school grades and scholastic aptitude test ratings, and their correlation with college grades is revealed for both schools and individuals. This evidence is taken from a study of 50 graduating classes in high schools in Chicago and is supported by quotations from several other studies. The author suggests that gross misinterpretations of these indices for admission, taken either singly or together, might be overcome by a definite check on test ratings and grades compared by means of the school standing in a state-wide cooperative program. This will be possible shortly in several states. Until more such checks are available the admissions officer will have to develop his own knowledge of the relative meaning of grades issued by different schools and check the grades of each individual against an aptitude test score.—*R. A. Brotemarkle* (Pennsylvania).

1119. Brown, G. S. The case for curriculum revision. Melbourne: Melbourne Univ. Press, 1932. Pp. 183.—*M. B. Jensen* (Quenemo, Kans.).

1120. Brueckner, L. J., & Elwell, M. Reliability of diagnosis of error in multiplication of fractions. *J. Educ. Res.*, 1932, 26, 175-185.—Experimental study to develop a method of studying the consistency of errors in the multiplication of fractions by pupils. Six types of fractions were used as material and records were obtained from 327 pupils in five different schools in five different cities. Errors are studied under the following categories in rank order of frequency of occurrence: lack of comprehension of process, computation errors, difficulty in cancellation, difficulty in changing mixed numbers to improper fractions, difficulty in reducing proper fractions, ex-

amples omitted, difficulty in changing improper fractions to mixed numbers, errors in copying, legibility, and difficulty with signs. The first two types of error are by far the most frequent, while the last three are of relatively rare occurrence.—*S. W. Fernberger* (Pennsylvania).

1121. Chamberlain, H. E. School clinics. *Proc. First Int. Cong. on Ment. Hygiene*, 1932, 2, 285-302.—A description of a child guidance clinic which is associated with an American public school system. A review of the technique of handling individual cases is given. Clinics of this type seek not only to guide the child in his adjustment to school and to home, but also to assist in the reciprocal adjustment of the principal, the teacher and the parent. They act as interpreter between the student and the school, the student and home, and home and the school.—*B. Casper* (Clark).

1122. Cluley, J. B. A study of the relative amounts of transfer resulting from three methods of study. *J. Exper. Educ.*, 1932, 1, 34-42.—The subject matter of this investigation dealt with rectangles and triangles. Three phases of the material were considered: (1) general information; (2) recognition of the forms; and (3) computation of areas. Three different methods of instruction were used. Method A consisted of a formal presentation of information. The formula for finding the area of each figure was given and the children were instructed to find the area by means of it. Verbal problems dealing with abstract situations were used as practice material. Method B was based upon an objective presentation of information. For example, the area of a rectangle was shown to be the number of squares formed in the figure when lines are drawn, one linear unit apart, both ways across the rectangle. Problems used for practice were verbal but employed figures in their natural settings in the child's environment. In Method C the same instruction and presentation of information were employed as in Method B. Practice work was of two kinds: first, the subjects were given an opportunity to recognize triangles and rectangles in larger figures; second, subjects were requested to find areas of rectangles and triangles which were shown to be a part of a larger figure. These practice problems were not of the verbal type, but referred to the common figures and spaces in the child's environment. Results showed that Method B was superior to Methods A and C in teaching pupils to solve all types of problems used in this study. Transfer effect for Method B appeared to be greatest.—*H. W. Karn* (Clark).

1123. Cohen, S. M. The progressive Jewish school; an integrated activity curriculum. New York: United Synagogue of America, 1932. Pp. 181. \$1.75.—*R. R. Willoughby* (Clark).

1124. Cunningham, K. S. [Ed.] Australian Council for Educational Research, second annual report, 1931-1932. Melbourne: Australian Council for Edu. Res., 1932. Pp. 53.—In the report of the chief executive officer of the council, besides an account of expenditures and other official business, a list of investigations approved by the council for the year is given. Various tests and their standardiza-

tion, as well as investigations of left-handedness, imagination in children, the influence of motion pictures, and teaching methods of various kinds are typical of these researches. An account of the activities of each of the state institutes for educational research and sources of information concerning education in Australia and New Zealand are given in the remaining sections of the report.—*E. H. Kemp* (Clark).

1125. Dynes, J. J. Comparison of two methods of studying history. *J. Exper. Educ.*, 1932, 1, 42-45.—Two study techniques were used in this investigation: (1) read and reread the material; (2) read, outline, summarize and review the material. The data collected justify the following conclusions: The second method is slightly superior to the first for immediate learning, both in the total amount learned and the number of pupils who excelled by using this method. The second method is superior to the first for retention, both in the total amount retained and the number of pupils who excelled by using this method.—*H. W. Karn* (Clark).

1126. Engelhart, M. D. The relative contribution of certain factors to individual differences in arithmetical problem solving ability. *J. Exper. Educ.*, 1932, 1, 10-27.—In this study, the path coefficient technique was used for the determination of the relative contributions of intelligence, computation ability and reading ability to individual differences in arithmetical problem solving ability. Fifth-grade school pupils were used as subjects. The following results were obtained: (1) 25.69% of the variance in arithmetical problem solving ability is due to variation in intelligence as measured. (2) 42.05% of the variance in arithmetical problem solving ability is due to variation in computation ability as measured. (3) 1.33% of the variance in arithmetical problem solving ability is due to variation in reading ability as measured. (4) 33.59% of the variance in arithmetical problem solving ability is due to the influence of other causes.—*H. W. Karn* (Clark).

1127. Fenton, N. Mental hygiene and its administration in the high school. *Junior-Senior High School Clearing House*, 1932 (March), 426-431.—The main concern of this report is the description of an administrative technique which may be of service in connection with the mental-hygiene problems of elementary and high school students. The author divides the manifestations of maladjustment of children into three groupings, as follows: (1) minor expressions of mental unwholesomeness, such as general nervousness, worry, fear, temper tantrums, seclusiveness, bashfulness, negativism, nightmare, and the like; (2) marked insubordination, frequent truancy, extreme seclusiveness, and serious emotional problems; (3) extreme cases, including the problem children, the delinquents, and the markedly nervous or emotionally unstable. The constructive program includes the establishment of child-guidance clinics in various schools. "The essence of the child-guidance-clinic procedure is the pooling of information of the three specialists who compose it—the psychiatrist, the psychologist, and the psychiatric social worker—in arriving at an understanding of the child's prob-

lems and in formulating a program for his adjustment."—*H. W. Karn* (Clark).

1128. Finch, P. H., & Nemsek, C. L. The relationship of the Bernreuter Personality Inventory to scholastic achievement and intelligence. *School & Soc.*, 1932, 36, 594-596.—On the basis of the returns from 102 high school students correlations were computed between three different scores yielded by the Bernreuter Personality Inventory, the honor-point average earned on courses taken during the sophomore year, and average standing on five intelligence tests. It is concluded that the study "furnishes no evidence that the Bernreuter inventory is measuring any traits that contribute in any important degree to successful achievement in the high school."—*H. L. Koch* (Chicago).

1129. Fitzgerald, J. A. Words misspelled most frequently by children of the fourth, fifth and sixth grade levels in life outside the school. *J. Educ. Res.*, 1932, 26, 213-218.—Results of a study of spelling errors from 3184 letters written by children of these three grades from 41 states in the United States, collected by an indirect method. Many cities and rural districts were represented. The percentage of spelling error was 4.4. The 100 most frequently misspelled words are given with the frequencies of occurrence for each grade.—*S. W. Fernberger* (Pennsylvania).

1130. Gray, W. S. [Ed.] Provision for the individual in college education. Chicago: Univ. of Chicago Press, 1932. Pp. 270. \$2.00.—*R. R. Wiloughby* (Clark).

1131. Groves, E. R. Parent education. *Ann. Amer. Acad. Pol. & Soc. Sci.*, 1932, 160, 216-222.—A discussion of the need and function of parenthood education. Parenthood is an art that is shifting its base from tradition and automatic routine to science, and as such should receive special emphasis in the schools. Parenthood should be prepared for by both husband and wife. Parent education has the function of bringing to parents and the general public the realization of the need of specific instruction in various phases of family life, of helping those who are already parents to solve their problems, and of preparing younger individuals for future parenthood.—*C. C. Neet* (Clark).

1132. Gruenberg, S. M., & Gruenberg, B. C. Education of children for family life. *Ann. Amer. Acad. Pol. & Soc. Sci.*, 1932, 160, 205-215.—A discussion of the factors involved in education for successful family life and the function of the school and the home in such education. The function of the school is to present the advancements made by research in family life. The teaching of new views concerning foods, diet, clothes, interior decorating, budgeting, economy buying, hygiene, and child care forms a great portion of the subject matter. The home serves as the most vital influence in developing attitudes and values which children carry over into their own home-making. Sex education, education in the use of money, and the development of well-adjusted personalities should take place in the home. Thorough parent education and the education of younger people in anticipation of parenthood are requirements

of successful education for family life.—*C. C. Neet* (Clark).

1133. Hurst, A. D. Ways and means of teaching geometry to blind students. Part I. *Teachers Forum (Blind)*, 1932, 5, 25-28.—Many blind students have wrong conceptions of equality of angles, complementary and supplementary angles, perpendiculars, and "one line and only one may be drawn between two given points," because the figures in most texts are not sufficiently tangible. A geometric figure was cut out of beaver board for each proposition in Wentworth-Smith's *Plane Geometry*, and braille letters to take the place of the letters in the geometry were cut out and pasted on these figures at the desired places; in case a line was to be drawn somewhere in the figure, a corresponding groove was cut in the beaver board figure. With the help of such figures it was found that high school geometry could be made as real and as interesting to the blind as it is to the seeing.—*S. D. Robbins* (Boston).

1134. Jones, V., & Collamore, E. A. Teaching honesty through activities. Teachers' Lesson Unit Series No. 51. New York: Bureau of Publications, Teachers College, Columbia University, 1932.—This study presents the technique employed in and the results achieved from a project in character education in a sixth grade. The project involved the study and subsequent dramatization of a true story from the boyhood of Grover Cleveland; the first-hand study of standards of honesty in the community as met by the children themselves, resulting from which they began to identify themselves actively with the forces that safeguard society; and the carrying out of a community project involving the trusteeship of money entrusted to the class for worthy expenditure by a friend of the school.—*L. A. Averill* (Worcester State Teachers College).

1135. Kallen, H. M. College prolongs infancy. New York: John Day, 1932. Pp. 28. \$0.25.—The difficulties commonly recognized in connection with the college situation arise from the fact that the entire system of higher education is to be regarded as a device for maintaining social immaturity into the period of physiological adulthood.—*R. R. Wiloughby* (Clark).

1136. Kinney, L. B., & Eurich, A. C. A summary of investigations comparing different types of tests. *School & Soc.*, 1932, 36, 540-544.—The results of studies dealing with the following points regarding types of examinations are related and compared: validity, reliability, relative difficulty, comprehensiveness of sampling, effect on students' attitudes, and pedagogical value. More thorough exploring of the issues, it is maintained, is desirable, since a form of examination found superior for one purpose is not necessarily the most effective for other purposes. The outcomes of testing procedure other than the acquisition by the student of information especially deserve attention. A bibliography concerning examination methods is appended.—*H. L. Koch* (Chicago).

1137. Litterer, O. F. An experimental analysis of reading performance. *J. Exper. Educ.*, 1932, 1, 28-33.—In this study an attempt was made to determine the true relationship between visual appre-

hension, eye movements and achievement on reading tests. Three experimental methods were used in the analysis of reading performance: (1) the measurement of perception of visual apprehension with tachistoscopes; (2) the measurement of eye movements by means of direct and indirect observation of the eyes in reading; and (3) the paper and pencil tests constructed and standardized to measure individual and group performance in reading. Two records of each subject were taken at one sitting. Fourteen lines of easy prose were read for the first record and fourteen lines of more difficult prose for the second. Reliability of the measuring devices was given special attention. In general, the results warranted the conclusion that there is a fairly significant but not high relationship among visual apprehension scores, eye movements, and achievement test scores in reading.—*H. W. Karn* (Clark).

1138. Lynd, H. M. Parent education and the colleges. *Ann. Amer. Acad. Pol. & Soc. Sci.*, 1932, 160, 197-204.—From a practical viewpoint parent education in the college has not been fruitful, the reason being that such education has failed to change emotionally mature parents. Yet this is the task that parent education has tried to achieve. To be fruitful, parent education "must be extended from the education of adults, whose habits are already fixed, to pre-parental education at the college level." Such an education should concentrate "on learning rather than on teaching." To be adequate such education should aim at the richest development of the individual to enable him to understand his own personality needs, stresses and appetites. This can be attained only by a direct appraisal of oneself and an oblique approach through impersonal subject matter, i.e., "education for parenthood should help the individual to surmount the contemporary illiteracies of person to person relations, of mate-finding, of job-finding, and of rich employment of leisure." Such an education would be adequate for any individual or any pursuit, and if pre-collegiate and collegiate education were adequate and fulfilled their functions there would be no need of specific parent education. The trend toward adequate college education is becoming more and more prominent.—*C. C. Neet* (Clark).

1139. Mathews, C. O. The honor system. *J. Higher Educ.*, 1932, 3, 411-415.—A study of the attitudes of students and faculty members of Ohio Wesleyan University toward academic honesty was made by means of a personal opinion blank based on an early form of the Character Education Inquiry. It contained 36 descriptive statements of concrete situations involving academic honesty. 494 representative students (228 men, 266 women) and 46 faculty members gave responses indicating that they would not justify the actions, with wide variations. The variations in percentages not justifying the behavior for students range from 20% to 94%, and for faculty, from 35% to 100%, there being one case out of the 36 situations declared not justified by 100% of the faculty. This single instance was striking in comparison to a number of much more challenging situations. The results revealed little difference of opinion between men and women students or various

class groups, but a significantly larger percentage of faculty members refused to justify the actions in every instance. A comparative study shows a continued increase in proportion of individuals who refused to justify the concrete situations described, the percentages ranging from 52% in the ninth grade to 81% in the sophomore class, and decreasing slightly for the junior and senior years. A single statement was added in respect to reporting a "student observed in cheating," which gave a wide variation of responses as follows: student average: "justified" 32%, "doubtful" 20%, "unjustified" 48%; faculty: "justified" 67%, "doubtful" 11%, "unjustified" 22%. The author reports that in the light of the 25-year standing of an honor system in the institution, the rationalizations employed to justify almost any form of academic dishonesty make it clear that it is to be expected that honor systems are not only "ineffective" but that "the problem of academic honesty is always at hand."—*R. A. Brotemarkle* (Pennsylvania).

1140. Merry, F. K. Shall we teach contractions to beginning braille readers? *Teach. Forum (Blind)*, 1932, 5, 35-37.—One group of young children, just beginning braille reading, was taught braille grade one and a half (with its 44 contractions); a second group, fairly comparable in mental ability and degree of vision, was taught the customary full spelling (grade one). The percentage and types of errors made by each child in both groups were recorded under the following classifications: non-recognitions, substitutions, omissions, insertions, mispronunciations, and repetitions. It was found that non-recognitions and substitutions constituted 95% of the errors made by both groups. The teaching of contractions promoted greater speed of reading and in some instances greater accuracy without any deleterious effect upon spelling ability.—*S. D. Robbins* (Boston).

1141. Morrison, H. C. The practice of teaching in the secondary school. Chicago: Univ. of Chicago Press, 1931. \$3.00.—*R. R. Willoughby* (Clark).

1142. Myers, A. F. An evaluation of research on teacher preparation. *J. Educ. Res.*, 1932, 26, 161-174.—One difficulty in the studies of teacher preparation is the failure to obtain an adequate method of measuring teaching success. We have no general agreement as to what constitutes good teaching. Questions of job analysis and the amount and kind of laboratory school experiences in teacher preparation are discussed. The question of over-supply of teachers is considered.—*S. W. Fernberger* (Pennsylvania).

1143. Nelson, E. La educación en las obras de prevención y de protección de la infancia. (Education in preventive and protective work for children.) *Rev. de crim. psiquiat. y med. leg.*, 1931, 18, 686-706.—(Soc. Sci. Abst. IV: 15712).

1144. Nield, J. W. What can we expect of probationers? *School & Soc.*, 1932, 36, 574-576.—The analysis concerns the male freshmen at the University of Iowa for the years 1925-1928 who were placed on probation because in their first semester in college they had passed in only one-half to two-thirds of

their work. Three-fourths of the probation group remained in college not more than four semesters. Hence the early elimination of the poor and the early detection of the good risks seems important. It is maintained that any attempt to predict the successful completion of college work on the part of the members of the probation group may well take into account the student's standing on a psychological examination, his first-semester college grades, his age, and his father's occupation. Of the 84.3%, for example, who ranked below the median on the psychological examination only 2% graduated.—*H. L. Koch* (Chicago).

1145. Peterson, H. J., & Peterson, J. C. Instructional tests in psychology; for use with the new self-instructor and tester. Manhattan, Kans.: J. C. Peterson, 1932. Pp. 31.—This mechanical tester is designed to accompany Woodworth's (revised) *Psychology*. The booklet comprises 13 series of questions based on the 23 chapters of the text. Each question is answerable as either true or false. Twelve tester-sheets have been devised, each of which carries a series of characters so arranged that when one of them is touched with a piece of moistened felt its color changes to either red or blue. If the correct character is moistened, it changes to blue; if the incorrect one is moistened, it changes to red. An identification device tells which form of the tester to use with a given series of questions. The device may be used either by the student as a self-tester or by the instructor as a means of obtaining an objective measure of the student's progress in the study of the textbook.—*L. A. Averill* (Worcester State Teachers College).

1146. Peterson, J. C., & Peterson, H. J. Reducing the costs of tests without impairment of their value. *Trans. Kans. Acad. Sci.*, 1932, 35, 132-140.—Discusses the economy in constructing objective tests of the equation completion, numerical proportion, obstructed reading and similar types, which require less than one-third as much space on a booklet as is used by such tests as the Iowa Placement, Otis S-A Intermediate, Terman Group, Thurstone Psychological, and others. Discusses also the use of separate answer sheets or of detachable answer-strips which render test booklets capable of repeated use, and describes three new automatic self-scoring devices which the authors have developed: the Perfo-Scorer, the Thermo-Scorer, and the Chemo-Scorer, the two last depending for their reaction upon their treatment with sympathetic, sensitive inks.—*L. A. Averill* (Worcester State Teachers College).

1147. Pressey, S. L. A third and fourth contribution toward the coming "industrial revolution" in education. *School & Soc.*, 1932, 36, 668-672.—The author makes a plea for the development of mechanical labor-saving devices to serve the teacher and research worker. He describes two contributions of his own—one, a machine for automatically scoring and tabulating by item the results of tests; the other, a generalized separate answer unit and scoring device.—*H. L. Koch* (Chicago).

1148. Richards, G. Geology—an easier study for boys or for girls? *Science*, 1932, 76, 434-435.—

Taking the marks of 473 boys and girls in the introductory course in physical geology in college, the author finds that the study of geology is markedly easier for boys than for girls, and believes that an important element in this difference is that boys adjust themselves more rapidly than girls to the changes in methods of instruction in passing from high school to college.—*P. Seckler* (Clark).

1149. Russell, B. Education and the modern world. New York: Norton, 1932. \$2.50.—*R. R. Willoughby* (Clark).

1150. Sears, J. B. The administration of public school research policies. *J. Educ. Res.*, 1932, 26, 186-198.—Discussion of the development of a research policy with the consideration of what such a program should include, the organization of the research staff, and the like. The author points out the advantages for a school system of the adoption of such a program.—*S. W. Fernberger* (Pennsylvania).

1151. Shannon, J. R. Professional experience of professors of education. *School & Soc.*, 1932, 36, 638-640.—*H. L. Koch* (Chicago).

1152. Walther, J. E. Measuring effectiveness of personnel counseling. *Person. J.*, 1932, 11, 227-236.—A program of personnel counseling was developed and carried out with 994 freshmen in the two first-year classes at Purdue University during 1930-31 and 1931-32. The purpose of the program was to improve the scholarship of freshmen who were delinquent—below passing—at the end of the first eight weeks of school. The delinquent freshmen were divided into three equal groups by random sampling. One group was counseled by instructors, another by selected seniors, and the third remained uncounseled to serve as a control group. The counseling continued throughout the freshman year. The groups were compared statistically before, during, and after counseling. Those counseled by the seniors made the most progress, and significantly more progress than the control group. Those counseled by instructors also made more progress than the control group. The freshman opinions obtained through questionnaires revealed that about two-thirds felt they were helped by the counseling. The students counseled by the instructors believed they were helped more than those counseled by the seniors. The results indicate that personnel methods can be applied successfully to the counseling of students for the improvement of scholarship.—(Courtesy *Person. J.*).

1153. Watson, G. Wholes and parts in education. *Teach. Coll. Rec.*, 1932, 34, 119-133.—An address delivered before the Scholia Club, October 3, 1932. The thesis that "there is an important difference between experience which is merely a collection of elements and experience which is a unified whole," and that "however we may wish to account for the difference, its consequences are important for education," are discussed with particular attention to character education problems. "Within the Gestalt we can remember, we can achieve insight and understanding that is not possible so long as the parts which make it up are more or less unrelated."—*J. M. Stalnaker* (Chicago).

1154. Whitney, F. L., & Armentrout, W. D. The total load of students. *J. Higher Educ.*, 1932, 3, 427-430.—A questionnaire study of the total load of student hours from a fair sampling of students at the Colorado State Teachers College shows "that the central tendencies of faculty expectation and of actual student preparation, so far as course work and extra-class activities are concerned, nearly strike a balance." The study was compared with similar studies in some 17 other colleges, the following results being generally accepted as the central tendency, with a recognition of wide variation throughout. The total number of hours generally used by a college student in the classroom for classroom preparation and extracurricular activities is about 56, distributed as follows: 57% for preparation, 28% in the classroom, and 15% in extra-curricular activities. The study indicates no check on the use of the remaining time.—R. A. Brotmarkle (Pennsylvania).

1155. Wickenden, A. C. The effect of the college experience upon students' concepts of God. *J. Relig.*, 1932, 12, 242-267.—(Soc. Sci. Abst. IV: 15732).

1156. Woolley, H. T. Education of the pre-school child (nursery school). *Proc. First Int. Cong. on Ment. Hygiene*, 1932, 2, 697-745.—This discussion is divided into three sections. The first is devoted to the education of children between birth and eighteen months of age. Included in this section are: a short history of the literature devoted to this period; the development of measures of mental ability; experiments on the relation between social factors, mental acquisition and IQ; use of senses and development of perception; development of motor coordination; attention; memory; thinking; initiative and creative work; emotions; social reactions; religion. The second section deals with the educational progress of children between eighteen months and five years, under three main headings: (1) capacities developed in the usual processes of every-day living; (2) capacities developed in play; (3) capacities developed in contact with the esthetic arts. The third section is "a consideration of mental hygiene as related to the mental and social development of the young child."—B. Casper (Clark).

1157. Wyndham, H. S. Class grouping in the primary school. Melbourne: Melbourne Univ. Press, 1932. Pp. 139.—A survey of the class grouping systems used in the 276 primary departments in the Sydney metropolitan area. Issued by the Australian Council for Educational Research.—M. B. Jensen (Quenemo, Kans.).

[See also abstracts 809, 932, 1042, 1065, 1101, 1108, 1166, 1170, 1172.]

BIOMETRY AND STATISTICS

1158. Burt, H. J. Analysis of social data. *Missouri Agric. Exper. Sta., Res. Bull. No. 155*, 1931. Pp. 98.—This is a study of research methods of analysis made practicable by the development of a new machine, the selecto-meter, for counting, combining, correlating and comparing social data on a large scale. The machine opens a new field of research analysis through its ability to handle combinations, thus permitting a functional analysis of social behavior as distinct from the usual numerical analysis.

The data used in demonstrating the machine concern the behavior of people in terms of the number of hours they have attended religious, educational, social and recreational events during a stated period of time. These data were selected because they featured several forms of behavior and because they were highly reliable. They were secured by day-by-day record kept for a period of three months. The first step in the analysis was to reduce the materials to (1) indivisible units of behavior, (2) indivisible behaving units, and (3) indivisible conditioning factors. The operation of the device then becomes purely mechanical, eliminating the sources of error in hand labor, and combining many of the single processes of standard machines by a condensed distribution method which it makes available. This also eliminates the need for partial correlation, and gives the relationship between the two original variables in terms of successive step-intervals of the constant. Comparisons indicate that this method is more useful in showing relationships than is the usual Pearsonian technique. There is a distinction between numerical and functional statistical analysis, and this study shows that the influence of any single factor may be changed radically when it is embodied in a functional combination. The ratio of actual occurrence to chance occurrence is a common denominator and may be regarded as a norm of social measurement, which means that the element of chance is held constant or eliminated. The discovery of the fundamental combinations associated with the several step intervals of a given form of behavior makes it possible to construct a prediction table by means of which the average behavior can be predicted from the constituent factors. (Twenty-eight tables and photograph of the selecto-meter.)—(Soc. Sci. Abst. IV: 15833).

1159. Chapin, F. S. A single ratio product formula for correlation by the short-cut method. *J. Exper. Psychol.*, 1932, 15, 354-356.—A formula is presented which is superior to others, it is asserted, because it is necessary to calculate only one ratio and because integers only are employed.—S. Renshaw (Ohio State).

1160. Cheshire, L., Oldis, E., & Pearson, E. S. Further experiments on the sampling distribution of the correlation coefficient. *J. Amer. Statist. Assn.*, 1932, 27, 121-128.—The distribution of r is shown according to the normal theory, following R. A. Fisher, and according to 1000 random samples of 5, 500 samples of 10, and 250 samples of 20. The samples of 10 and 20 were made by combining samples of 5, therefore they do not form a completely independent series. The comparison shows that the observed and theoretical values are quite close for r , but the observed σ_r is always less than the theoretical. The agreement between observed and theoretical values increases as the size of the sample increases.—E. B. Greene (Michigan).

1161. Constance, C. L. Correlation by calculating machine. *J. Exper. Psychol.*, 1932, 15, 458-464.—This method of calculating the Pearson correlation coefficient is presented in order to furnish more insight into the significance of calculating machine manipulations and to suggest several improvements

in method which the author has found useful. The method is recommended on the grounds of speed and accuracy.—*S. Renshaw* (Ohio State).

1162. Dunn, H. L. Adaptation of new geometric code to multiple punching in mechanical tabulation. *J. Amer. Statis. Asso.*, 1932, 27, 279-286.—By allotting to each horizontal row a number in a geometrical progression, 4095 numbers can be punched in each vertical column. Before punching the raw scores must be analyzed into their code equivalents by the use of a table which is furnished. These intermediate steps have not proved unduly difficult, and the method eliminates the use of two or more cards for the same person. It also facilitates the summations of totals and averages.—*E. B. Greene* (Michigan).

1163. Griffin, H. D. On the coefficient of part correlation. *J. Amer. Statis. Asso.*, 1932, 27, 298-301.—A nomogram is given for the computation of coefficients of part correlation and the coefficients of part determination in problems of any number of variables.—*E. B. Greene* (Michigan).

1164. Horst, P. A general method for evaluating multiple regression constants. *J. Amer. Statis. Asso.*, 1932, 27, 270-278.—A logical method for calculating all values from which standard multiple regression constants may be derived is described and illustrated with work sheets from a seven-variable problem. The labor is only about 50% more than that required for the solution of regression equations alone.—*E. B. Greene* (Michigan).

1165. Horst, P. Comparable scores from skewed distributions. *J. Exper. Psychol.*, 1932, 15, 465-468.—A mathematical operation is presented whereby test scores from data in experimental psychology which give a skewed distribution may be simply and accurately transmuted into distributions which are approximately normal.—*S. Renshaw* (Ohio State).

1166. Horst, P. The difficulty of multiple choice test item alternatives. *J. Exper. Psychol.*, 1932, 15, 469-472.—The relative difficulty of test item alternatives is obtained by a mathematical procedure. The difficulty of the test item measured from the mean of the group in units of its standard deviation is the sigma value of twice the proportion of individuals marking the wrong alternative.—*S. Renshaw* (Ohio State).

1167. Huntington, E. V. An improved equal frequency map of the normal correlation surface, using circles instead of ellipses. *J. Amer. Statis. Asso.*, 1932, 27, 251-255.—By using oblique coordinates, circles, and radial lines the comparison of a given scatter diagram with a normal distribution having similar values can be greatly facilitated. Moreover a large amount of information can be obtained by counting the dots in any particular area.—*E. B. Greene* (Michigan).

1168. Neyman, J. O korelacjji pomiędzy floryzami o wspólnym mianowniku. (The correlation between quotients of a common denominator.) *Kwart. Stat.*, 1931, 8, 857-865.—French summary.—(Soc. Sci. Abst. IV: 15810).

1169. Tryon, R. C. Correlation form with absolute checks of all operations including plotting.

Berkeley, Calif.: Associated Students' Bookstore, 1932. 5c each, \$4.50 per 100.—A convenient form devised to indicate clearly all the operations involved in correlation. An elaborate system of checking is included in which each check formula checks all preceding operations.—*P. Seckler* (Clark).

[See also abstract 1126.]

MENTAL TESTS

1170. Brolyer, C. R. Seventh annual report of the commission on scholastic aptitude tests. New York: College Entrance Examination Board, 1932. Pp. 21.—4221 boys and 3222 girls took the scholastic aptitude test on June 25, 1932. Centers at which the tests were given and the number of candidates examined at each center are listed. In addition to other changes in details of checking and scoring from previous years, all parts of the test were given a final inspection for irregularities of scoring, and critical limits established. Rescoring was carried out whenever necessary. Means, sigmas and numerous correlations are given, also comparative data from previous years. The report emphasizes the fact that it has been possible to build tests consistently in such a way that the mean will subsequently be found at or near a desired point of the scale. The final section of the report lists the means and sigmas of scores on all portions of the scholastic aptitude test of the applicants for admission to 19 different colleges.—*H. W. Karn* (Clark).

1171. Bronner, A. Special mental abilities and disabilities. Importance of wide-range testing. *Proc. First Int. Cong. on Ment. Hygiene*, 1932, 2, 422-438.—The importance of the relationship between special mental abilities and disabilities and mental health is stressed and exemplified by means of clinical studies. "Psychological tests for bringing to light unevenness in abilities . . . make possible practical educational and vocational adjustments, and these have been found effectual in preventing unfortunate personality development and in increasing the possibilities of mental health."—*B. Casper* (Clark).

1172. Christiaens, A. G. Intelligence testing in vocational guidance. *Proc. First Int. Cong. on Ment. Hygiene*, 1932, 2, 315-334.—Stating that the evaluation of human intelligence has important bearings upon the work of vocational guidance, the author declares that he has found measures of intelligence which use verbal material to be inadequate. A description of the Decroly box, which the author has found of great value in the field of vocational guidance in estimating degrees of intelligence, concludes the paper.—*B. Casper* (Clark).

1173. Decroly, O., & Segers, J. E. Essais d'application du test de Ballard. (An attempt to apply the Ballard test.) *Doc. péd. Soc. belge de pédotechnie*, 1932, 2, No. 1. Pp. 149.—This latest volume of the publications of the Société Belge de Pédotechnie reports the results of applying an adaptation for Belgian school children of the Ballard "economical" group test of intelligence (so called because printed papers are not used, the items being dictated or written on a black board). The test was translated into both French and Flemish and applied to various

groups of children. The first group comprised 3845 boys and 2315 girls, 8 to 14 years old, from several cities in Belgium. The theoretical norms proposed by Ballard and those obtained are compared. The mean scores are given for Walloon (French-speaking) and Flemish children, for the urban and rural groups, for those from high and low social levels; the indices of reliability for the differences are not reported. A second group to which the test was applied consisted of 166 boys of a school in a suburb of Brussels. The highest ρ between test results and teacher ratings was .52, P.E. .058; the lowest was .27, P.E. .072 ($N = 24$). An attempt to regroup the children on the basis of the data obtained proved satisfactory. Finally, a parallel form of the test elaborated by Decroly was given to 139 children of the last group. The coefficients of correlation (r) between both test forms, calculated for each grade, vary from .42, P.E. .126 ($N = 19$) to .82, P.E. .037 ($N = 35$). It is concluded that this test is a fairly good one for Belgian school children.—*R. Nihard (Liège)*.

1174. Graf, O. Über Einfluss der Arbeitszeit bei verschiedenen Intelligenzproben. (The influence of working time in various intelligence tests.) *Psychotechn. Zsch.*, 1932, 7, 96-109.—That the length of time which one is permitted to spend over a given intelligence test may significantly influence a person's test score has been shown in this study. A group of 100 policemen were submitted to a series of five tests, consisting of a completion, a recognition and a logical analysis test, plus an information test and the Bobertag-Hylla test. Every subject worked on each test for an hour or more. The working period was divided into small units and the test blanks were so arranged that the subject's amount of work during a given work unit was easily checked. It was found that with almost no exceptions the subjects attained constancy of group rank only after a longer period of time than one would usually expect. For example, if one ranked these subjects for each test in term of their accomplishment, after five, ten, fifteen, thirty, forty-five, and sixty minutes, the subjects changed their ranks during the early periods of work to such an extent that some who were very good at first became just medium or even poor after a longer working time, and vice versa. One might suggest as an approximate rule that a given person's rank has reached constancy at that length of time during which 80% of the subjects are able to finish the tests. For these tests and for these subjects that time was 25, 40, and 70 minutes. From a theoretical point of view this study shows that one must differentiate between intelligence and speed of adjustment. Some of our intelligence tests emphasize this second factor, while they are interpreted as measuring the first. From a practical standpoint it would be wise, whenever an intelligence test is used, not only to report the kind of test, but also the amount of time permitted for the test. This of course presupposes that different tests should have different time limits.—*C. Burri (Chicago)*.

1175. Greene, E. B. The Michigan non-verbal series. A non-verbal test series for measuring hand

and eye coordination, observation, and comparison, from four years to superior adult. *J. Soc. Psychol.*, 1932, 3, 354-359.—Notice and short description of a battery of three tests designed to measure "human performance," in particular, in the "observation and comparison of printed objects."—*E. B. Newman (Harvard)*.

1176. Harvey, O. L. Concerning the Thurstone "Personality Schedule." *J. Soc. Psychol.*, 1932, 3, 354.—Erratum.—*E. B. Newman (Harvard)*.

1177. Hevner, K. A method of correcting for guessing in true-false tests and empirical evidence in support of it. *J. Soc. Psychol.*, 1932, 3, 359-362.—The use of a double device for marking the answers to true-false and similar tests is suggested. In addition to the usual judgment, the subject is allowed to indicate his degree of certainty on a three-point scale. Scores on the Hevner test of musical appreciation and the Meier-Seashore Art Judgment Tests give consistently greater reliability and higher correlations with related measures when calculated on the basis of the right answers weighted for degree of confidence rather than the usual methods of number right or number right minus number wrong.—*E. B. Newman (Harvard)*.

1178. Hildreth, G. Mental ability measured by verbal and non-verbal tests. *Teach. Coll. Rec.*, 1932, 34, 134-142.—Three groups of children—24 four-year-olds, 52 five-year-olds, 57 six-year-olds—were selected who had IQ's over 115 as measured by the Stanford Revision of the Binet Test. They were then given the Pintner-Paterson Performance Test Series and the test of "drawing a man" as standardized and administered by Goodenough. The results "give evidence that young bright children are not, as commonly supposed, mediocre or even deficient in meeting non-verbal or practical situations as contrasted with verbal or abstract conditions, but that, so far as the limited number of cases indicates, they are equally gifted in both."—*J. M. Stalnaker (Chicago)*.

1179. Hinckley, E. D. The influence of individual opinion on construction of an attitude scale. *J. Soc. Psychol.*, 1932, 3, 283-296.—Since an important step in the construction of a Thurstone attitude scale consists in the rating of the items of the test as to the degree of the trait which they display, it is necessary to show that this rating procedure is uninfluenced by the opinions of the judges. The writer, therefore, has used three sets of judges in the construction of an attitude scale. The scale is to measure attitude toward the negro, and the groups of judges selected were accordingly northern white, southern white, and negro students, who might be expected to vary widely in their opinions. The judges were further grouped on the basis of their stated attitudes. No significant differences between the results obtained from the three groups appeared, so that the writer concludes that such a scale is independent of the attitudes of the raters used in its construction.—*E. B. Newman (Harvard)*.

1180. Line, W., & Kaplan, E. The existence, measurement and significance of a speed factor in the abilities of public school children. *J. Exper.*

Educ., 1932, 1, 1-8.—This study first deals with an examination of intelligence test scores, with a view to determining whether some aspect of speed comes to light. Analysis of results showed that the degree of gain in scores was relative to the difficulty of the material as well as to the intelligence of the subjects. Furthermore, some indication was obtained of a group speed factor other than speed of thinking where easy material was employed. As a result of these findings, tests were constructed which depended on this group speed factor more particularly. The speed factor itself was finally examined in relation to age, school marks, intelligence, sex, misdemeanors, and perseveration. The following conclusions were drawn: (1) The speed factor is some factor other than g . (2) The speed factor is not related to mental age. (3) There is evidence to show that greater frequency of misdemeanors is somewhat characteristic of the slower pupils. (4) Speed or alertness is not related to perseveration, but the development of alertness appears to overcome high perseveration. (5) Evidence suggests that speed is subject to improvement with practice, and that this improvement does not run parallel to mental age so much as to speed itself. (6) There is some evidence that the speed here measured is in some degree relative to IQ in a classroom situation, since the younger children (those with higher IQ) tend to be the most "alert." This may be the result of their competing with older children. The questionable nature of the IQ ratings available, however, makes it impossible to be more definite on this point. Further, it is suggested that intensive case studies of individuals are necessary before interpretation of this factor is possible.—H. W. Karn (Clark).

1181. Madden, R. A note on the eight and nine year levels of Stanford-Binet. *School & Soc.*, 1932, 36, 576.—The Stanford-Binet intelligence test was given to 92 New York children whose average chronological age was 11 years and 4 months and whose average mental age was 9 years and 1 month. The number of tests successfully passed decreased with the age level of the tests except in the case of those at the eight- and nine-year levels. The validity of the scale is hence questioned.—H. L. Koch (Chicago).

1182. Salas, J. El psicodiagnóstico de Rorschach. (The psychodiagnostics of Rorschach.) *Arch. de neurobiol.*, 1932, 12, 316-339.—The present work is composed of fragments of a still larger work which will appear soon in the form of a monograph. It contains the methods used, difficulties, and results found in normal cases. The test consists of interpreting some plates which contain a few blots of ink of indefinite shape. These are prepared by putting large drops of ink on paper and folding it once; thus symmetrical figures are obtained. The different plates are shown to the subject under experiment and he is asked to tell what he sees or what he thinks the pictures represent. From the answers given the personality of the subject is studied. A detailed analysis of this experiment is described. For example, the attitude of an individual who exclaimed that he saw an animal which could not decide to cross a precipice is inferred from the symbol in which his personality

is reflected. It was evident that this individual found himself in a difficult situation which he could not solve; he later confirmed this. In his childhood he was known as a timid boy, and at the time of the experiment he found himself in a triple difficulty—professional, sexual, and familial.—E. Johns (New York City).

1183. Shih, M. H. Objective examination: a new tendency in educational testing. (*Chinese*) *Educ. Rev.*, 1931, 23, No. 7, 29-35.—The author first points out the inadequacies of the standardized tests, then discusses the nature and advantage of the objective or new type examination. The objective examination is divided into two main groups, recall and recognition, and under each group it is subdivided into several types. Simple recall and completion tests belong to the first group; while true-false tests, multiple-choice tests, best-answer tests, matching tests, and analogy tests belong to the second group. The steps of constructing an objective examination are as follows: (1) state the aim and scope of the examination; (2) prepare questions; (3) arrange the questions in an order of increasing difficulty; (4) construct duplicate forms of the examination; (5) prepare explanatory material on the method of constructing the examination; (6) prepare standard checking sheet; and (7) fix the criteria of scoring. Ten general principles guiding the construction of an objective examination are enumerated: (1) choose only those questions that involve least or no linguistic trouble; (2) the number of questions under preparation must be several times larger than actually needed; (3) the number of easy and difficult questions should be the same; (4) the first few questions should be very easy and the last few questions very difficult; (5) each question must be an independent unit—the meaning or answer of one question must not be understood through the light of others; (6) a large number of questions is preferred; (7) questions should be grouped according to form; (8) special instructions should be given in regard to doubtful questions; (9) papers must be checked by colored pencil or ink; (10) papers must be checked question by question.—C.-F. Wu (Nat. Res. Inst. Psychol., China).

1184. Wang, C. K. A. Suggested criteria for writing attitude statements. *J. Soc. Psychol.*, 1932, 3, 367-373.—Sixteen criteria are suggested for use in the selection of proper statements for a Thurstone attitude scale. Illustrative material is drawn from a number of scales of this type, together with data showing the effect of violating the rule given.—E. B. Newman (Harvard).

1185. Willoughby, R. R. Thurstone personality schedule, Clark revision. Worcester, Mass.: Author, 1932. Blank, pp. 1; directions, pp. 2. \$0.75 per pkg. of 25.—A selection of 25 items from the original instrument, chosen for reliability, validity, and consistency. The scoring scheme has been altered from a two- to a five-response scale, and the total score is the sum of the item scores. The time necessary for administration is about 10 minutes; the reliability is about .9.—R. R. Willoughby (Clark).

[See also abstracts 879, 1128, 1166.]

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